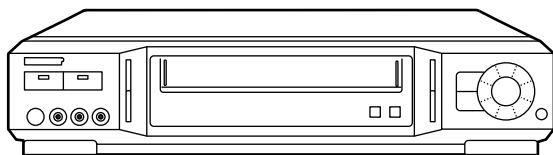


# SHARP SERVICE MANUAL

S6918VC-S101U

**VHS** VIDEO CASSETTE RECORDER

**MODEL**
**VC-S101U**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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**SHARP CORPORATION**

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after sales service only.

The contents are subject to change without notice.

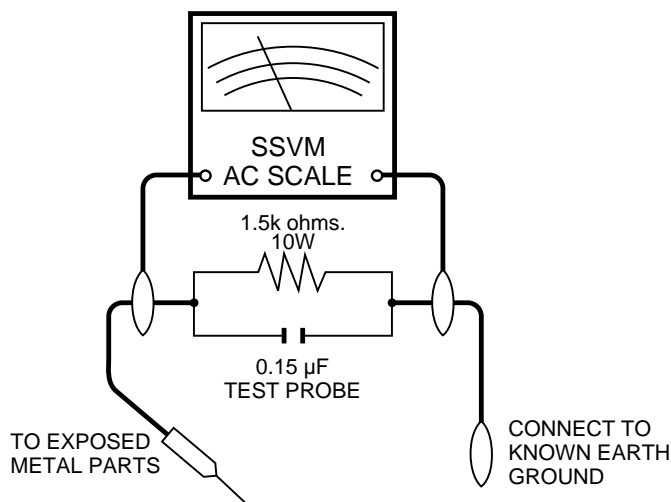
## IMPORTANT SERVICE NOTES

### BEFORE RETURNING THE VIDEO CASSETTE RECORDER

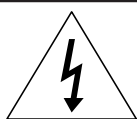
Before returning the video cassette recorder to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the video cassette recorder.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for current in the following manner.
  - Plug the AC line cord directly into a 120 volt AC outlet (Do not use an isolation transformer for this test).
  - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit.
  - Use an SSVM or VOM with 1000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor (See Diagram).
  - Move the resistor connection to earth exposed metal part having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, etc.) and measure the AC voltage drop across the resistor. Reverse the AC plug on the set and repeat AC voltage measurements for each exposed

part. Any reading of 0.45V rms (this corresponds to 0.3mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the video cassette recorder to the owner.



**WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

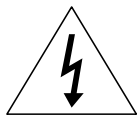


### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



**CAUTION:** TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

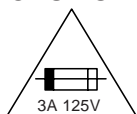


This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.



This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

### CAUTION:



This symbol mark means fast operating fuse. For continued protection against risk of fire, replace only with same type fuse F901 (3A, 125V).

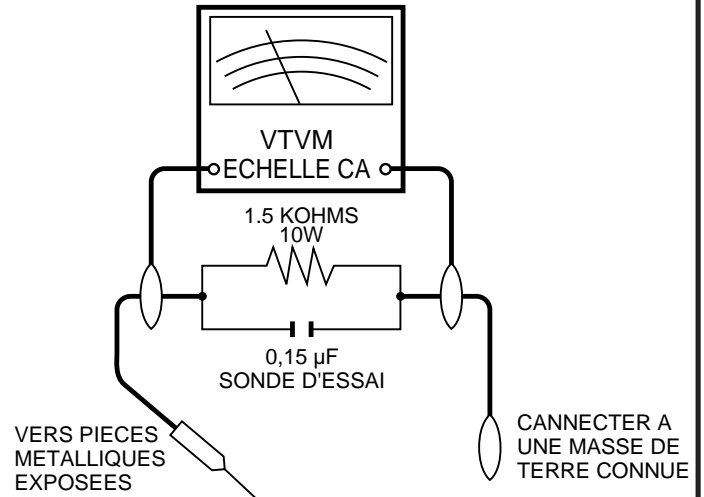
## NOTES DE SERVICE IMPORTANTES

### AVANT DE RENDRE LE MAGNETOSCOPE



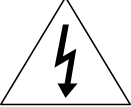

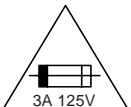
Avant de rendre le magnétoscope à l'utilisateur, effectuer les vérifications de sécurité suivantes.

1. Vérifier toutes les gaines de fil pour être sûr que les fils ne sont pas pincés ou que le matériel n'est pas coincé entre le châssis et les autres pièces métalliques dans le magnétoscope.
2. Vérifier tous les dispositifs de protection tels que les boutons de commande non métalliques, les matériaux d'isolement, le dos du coffret, les couvercles de compartiment et ajustement ou les boucliers, les réseaux de résistance/condensateur d'isolement, les isolateurs mécaniques, etc.
3. Pour être sûr qu'il n'y a aucun risque de choc électrique, vérifier le courant de fuite de la manière suivante.
  - Brancher le cordon d'alimentation secteur directement dans une prise de courant de 120 volts. (Ne pas utiliser de transformateur d'isolement pour cet essai).
  - Utiliser deux fils à pinces et connecter une résistance de 10 watts 1,5 kohm en parallèle avec un condensateur de 0,15  $\mu\text{F}$  en série avec des pièces du coffret métallique exposées et une masse de terre connue telle qu'un tuyau ou un conduit d'eau.
  - Utiliser un VTVM ou VOM avec une sensibilité de 1000 ohms par volt ou plus ou mesurer la chute de tension CA entre la résistance (voir diagramme).
  - Déposer la connexion de la résistance à toutes les pièces métalliques exposées ayant un parcours de retour au châssis (connexions d'antenne, coffret métallique, têtes de vis, boutons et arbres de commande, etc.) et mesurer la chute de tension CA

entre la résistance. Inverser la fiche CA (une fiche intermédiaire non polarisée doit être utilisée à seule fin de faire ces vérifications.) sur l'appareil et répéter les mesures de tension CA pour chaque pièce métallique exposée. Toute lecture de 0,45 Vrms (ceci correspond à 0,3 mArms CA) ou plus est excessive et signale un danger de choc qui doit être corrigé avant de rendre le magnétoscope à son utilisateur.



**ATTENTION: POUR REDUIRE LES RESQUES D'INCENDIE OU DE CHOC ELECTRIQUE, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE.**

	<b>ATTENTION</b> RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR	
<b>ATTENTION:</b> AFIN DE REDUIRE LES RISQUES DE CHOC ELECTRIQUE, NE PAS RETIRER LE COUVERCLE, AUCUN ORGANE INTERNE NE PEUT ETRE REPARE PAR L'UTILISATEUR. CONFIER L'APPAREIL A UN DEPANNEUR QUALIFIE.		
	Ce symbole signale à l'utilisateur la présence d'une tension non isolée à l'intérieur de l'appareil qui peut être la cause de secousses électriques dangereuses.	
	Ce symbole avertit l'utilisateur que des instructions importantes relatives à l'utilisation et à l'entretien se trouvent dans le manuel accompagnant l'appareil.	
<b>PRECAUTION:</b>		
	Cette marque indique le fusible à action instantanée. Pour la protection continue contre le risque d'incendie, ne remplacer que par le fusible type F901 (3A, 125V).	

## PRECAUTIONS IN PART REPLACEMENT

***When servicing the unit with power on, be careful to the section marked white all over.***

***This is the primary power circuit which is live.***

When checking the soldering side in the tape travel mode, make sure first that the tape has been loaded and then turn over the PWB with due care to the primary power circuit.

Make readjustment, if needed after replacement of part, with the mechanism and its PWB in position in the main frame.

### **(1) Start and end sensors: Q701 and Q702**

Insert the sensor's projection deep into the upper hole of the holder. Referring to the PWB, fix the sensors tight enough.

### **(2) Photocoupler: IC901**

Refer to the symbol on the PWB and the anode marking of the part.

### **(3) Cam switches A and B: D708 and D709.**

Adjust the notch of the part to the white marker of the symbol on the PWB. Do not allow any looseness.

### **(4) Take-up and supply sensors: D707 and D706.**

Be careful not to confuse the setting direction of the parts in reference to the symbols on the PWB. Do not allow any looseness.

# 1. GENERAL INFORMATION

## 1-1 FEATURES

- S-VHS (S-VHS ET)
- Universal R/C
- EZ Set up (automatically channel set up)
- Auto Tracking
- AV Auto REC
- Tamper Proof Function
- Outline revision of chroma
- High speed FF/REW (x 360)

## 1-2 SPECIFICATIONS

### 1) Recording system

Format: VHS NTSC standard  
 Luminance signal: FM recording  
 Chroma signal: Low frequency converted direct recording  
 Color system: NTSC  
 Number of video head: 4  
 Tape speed: SP (33.35mm/sec.)  
 LP (16.67mm/sec.) (playback only)  
 EP (11.12mm/sec.)

### 2) Video signal

Input level: 0.5 ~ 2.0Vp-p, 75 ohm Unbalanced  
 Output level: 1.0Vp-p, 75 ohm Unbalanced  
 Horizontal resolution: 230 lines (SP mode), 400 lines (S-VHS)  
 Signal to noise ratio: 50dB (SP mode)

### 3) Audio signal

Input level: -8dBs (309mVrms, 47k ohm)  
 Output level: -8dBs (309mVrms, 1k ohm)  
 Frequency response: 80Hz ~ 10kHz (SP mode linear), 20Hz ~ 20kHz (Hi-Fi mode)  
 Signal to noise ratio: 43dB (SP mode linear)  
 Hi-Fi Dynamic range: 85dB (Hi-Fi models)  
 Wow and flutter: 0.005% max. (Hi-Fi mode) with T-120 tape

### 4) Receiving channel

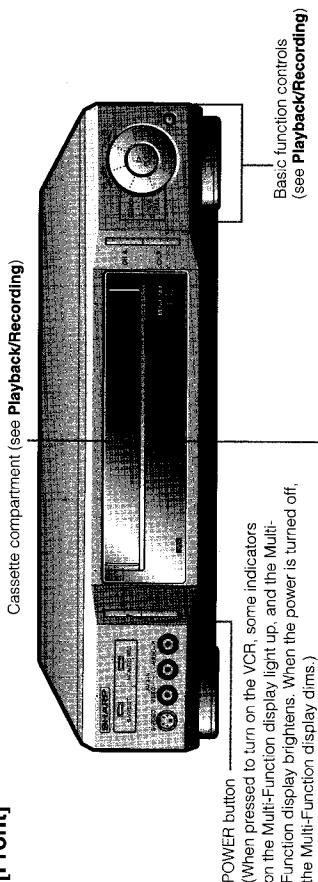
VHF: Channels 1 ~ 13  
 UHF: Channels 14 ~ 69  
 CATV: Channels A-8, A-5 ~ W+84  
 Antenna input Impedance: VHF/UHF; 75 ohm

### 5) Misc.

Fast forward/Rewind time: Approximate 1.0 minutes with T-120 cassette  
 Power source: 120V, 60Hz  
 Power consumption: 25W  
 Allowable ambient temperature: 5°C to 40°C (41°F to 104°F)  
 Operating humidity: below 80% RH  
 Dimensions: 430 (W), 281 (D), 92 (H) mm (16-15/16, 11-1/16, 3-5/8 inch)  
 Weight: 3.9kg (8.7 lbs)  
 Accessories included: 75 ohm coaxial cable, Operation manual, Timer card, Guarantee card (for SEC),  
 AV cable, S-VHS cable, Infrared remote control, Battery (2 pcs.)  
 Note: Specifications may be changed for improvement without notice.

Major Components of Your VCR

[Front]



Multi-Function Display (explained throughout the operation instructions)

When the power is on, each time **DISPLAY** is pressed, the Multi-Function display changes as follows:

- 1 Channel setting → 2 Tape counter → 3 Clock



NOTE

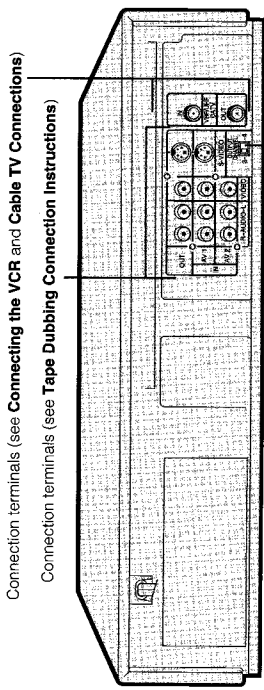
- Tape counter is displayed during playback, fast forward or rewind operation.
- When the power is turned off, the clock is displayed and the Multi-Function display becomes darker.

Display	Symbol	Function Status	Display	Symbol	Function Status
STOP	—	Stop	FF	—	Fast Forward
PLAY	▶	Play	REW	—	Rewind
PAUSE	⏸	Video Search, Slow, Still, Frame Advance	PAUSE	REC	Rec Pause
REC	REC	Record	—	⏏	Cassette-in
—	⏏	Tamper Proof Active	—	VCR	Unit in VCR mode

NOTE

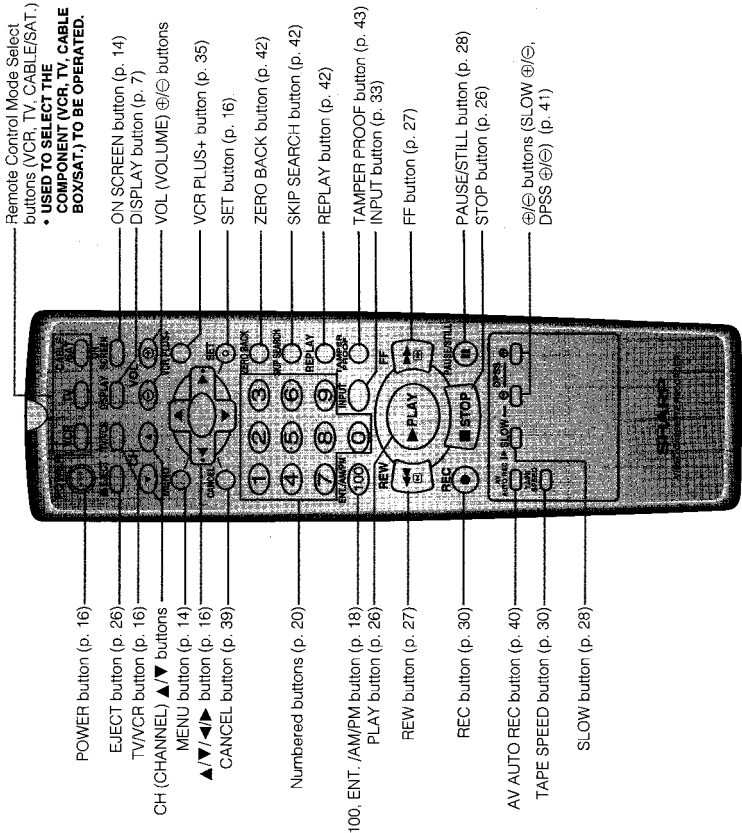
- The display will return to the original mode (counter or clock display) 3 seconds after the VCR enters the operation mode.

[Rear]



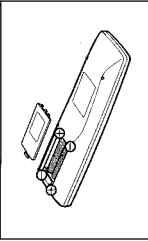
3 ↔ 4 OUTPUT CHANNEL selector (see Setting the 3 ↔ 4 Output Channel Selector)

Remote Control



Inserting the Batteries

Make sure that the batteries have been properly installed first. Fit two batteries type "AA". If the remote control stops working, fit new batteries. Ensure the batteries are fitted correctly, matching the polarities (⊕/⊖) indicated in the remote control.



NOTE

- After changing the batteries in the remote control, the code settings for the TV, cable box and Digital Satellite Receiver must be re-entered.
- Do not subject the remote control to shock, water or excessive humidity.
- The remote control may not function if the VCR sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if the remote control will not be operated for an extended period of time.
- If the remote control does not function properly when new batteries are installed, remove the batteries and keep pressing any button for 10 seconds before re-installing them.



## 2. DISASSEMBLY AND REASSEMBLY

### 2-1. DISASSEMBLY OF MAJOR BLOCKS

**TOP CABINET** : Remove 4 screws ①.

**FRONT PANEL** : Remove 2 screws ② and 7 clips ③.  
Be careful not to undo the lower hooks alone and attempt to tilt the front panel out of position. The jack PWB holder's right-hand hook may get broken. Undo the front panel's upper and lower hooks together and take out the front panel untilted.

**OPERATION PWB** : Remove 1 clip ④.

**JACK PWB** : Remove 1 screw ⑤ and 1 clip ⑥.

**JACK PWB HOLDER** : Remove 1 screw ⑦.

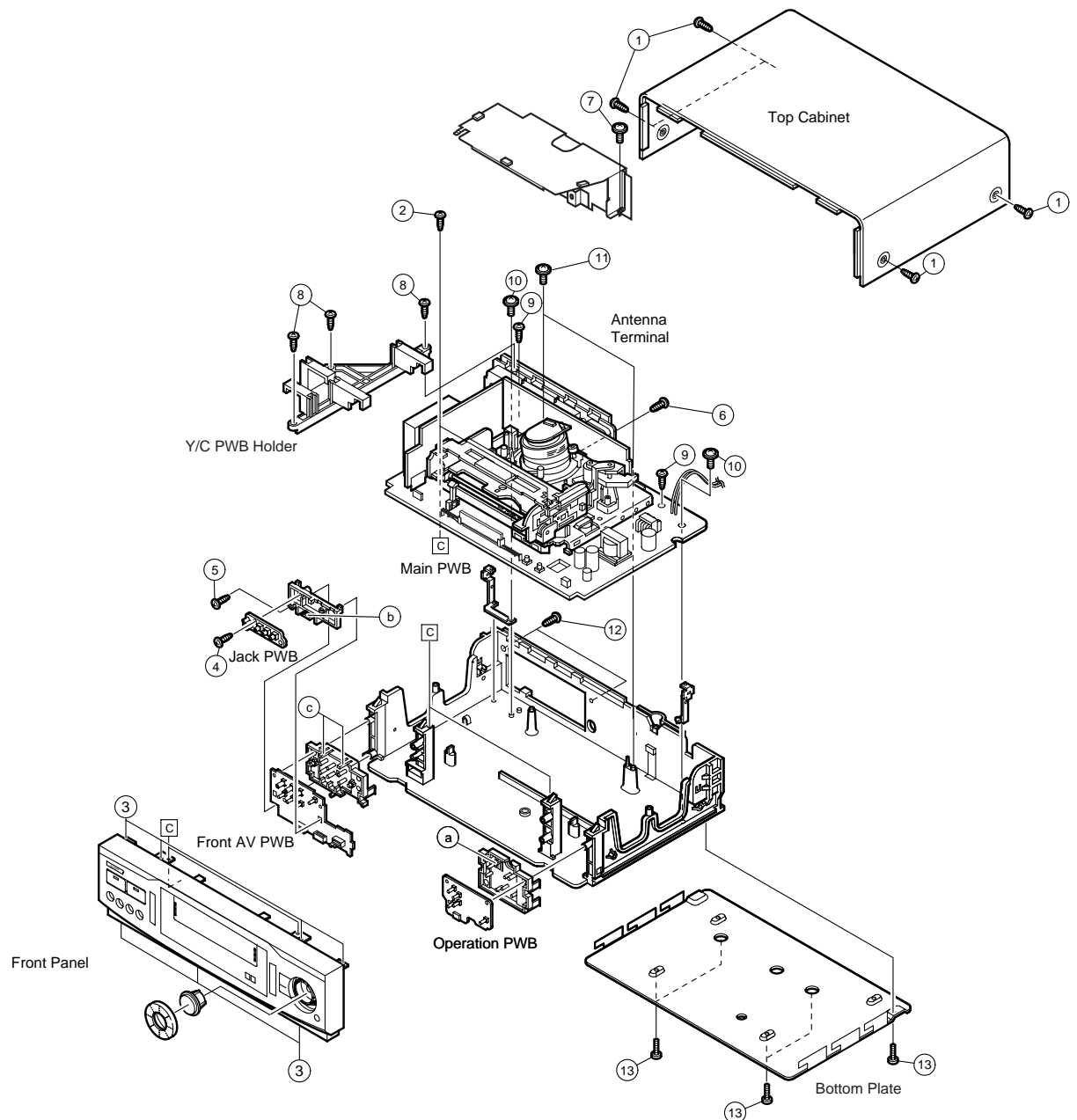
**FRONT AV PWB** : Remove 2 clip ⑧.

**SHIELD CASE** : Remove 1 screw ⑨ and ⑩. (One of the shield screws is also used to hold the drum in place. Once this shield screw has been removed, the drum base gets loose. In reassembling, refer to "Mounting the head amplifier shield" and take the tape travel checking procedure again.)

**Y/C PWB HOLDER** : Remove 3 screws ⑪.

**MECHANISM / MAIN PWB UNIT / ANTENNA TERMINAL COVER** : Remove 2 screws ⑫, 2 screws ⑬, 2 screws ⑭ and 2 screws ⑮. (Take the mechanism, the PWBs, and the antenna terminal board in this order out of the chassis.)

**BOTTOM PLATE** : Remove 5 screws ⑯.



## 2-2 DISASSEMBLY OF MECHANISM AND MAIN PWB ASSEMBLY

### 1.WHEN REMOVING MECHANISM FROM MAIN PWB

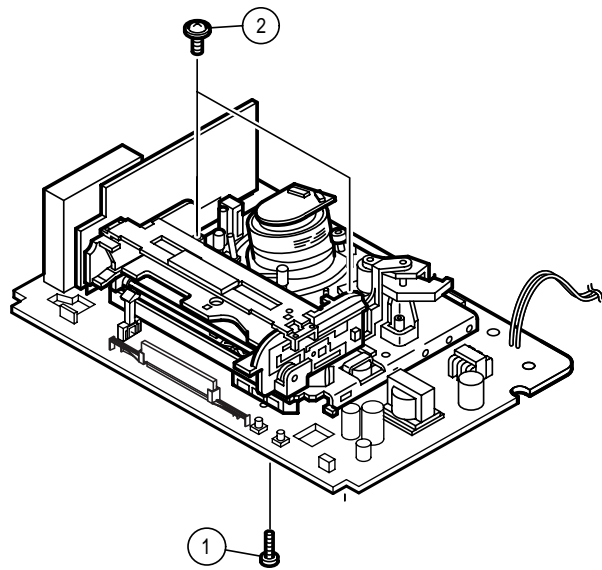
Remove 1 screw ① from behind of the PWB.

Remove FFC cables which connects mechanism and PWB.

Take out vertically the mechanism so that it does not damage the adjacent parts.

### 2.REMOVING THE MECHANISM AND CASSETTE CONTROLLER

Remove 2 screws ② fixing the cassette controller to the mechanism, and remove the cassette controller.



## REVISED DRAWING

(1)Remove this screw off the current shielding cover (PSLDM4557AJFW) at the back of the P frame. Fit the new shielding cover (PSLDM4567AJFW) in position, and apply the screw again to fix the cover.

(2)Lead with terminal (QCNW-0311AJZZ)

- Put solder at the specified spot on top of the U/V tuner.
- Solder the tip of the lead in position.
- Connect the terminal to the projection of the shielding case.

(3)Screw (XHPSD26P06WS0)

Screw the shielding case to the mechanism chassis.

(4)Spacer (PSPA0438AJZZ)

Place the spacers in the positions shown above.

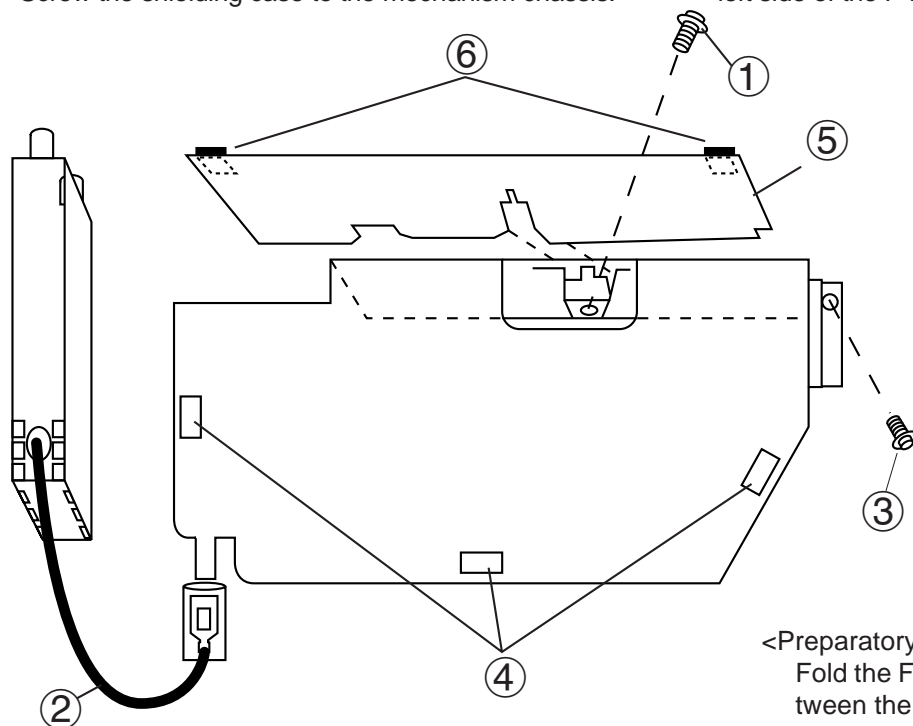
(5)Insulating sheet (PZETZ0004AJZZ)

Insert this sheet between the shielding cover and the terminal board PWB. Using the mats (6), secure the sheet tightly on the PWB.

(6)Fixing mat (ZTAPEZ950010E)

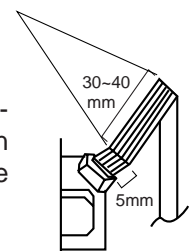
Apply the two back-up mats to secure the insulating sheet to the terminal board PWB.

(7)Without the insulating sheet (PZETL0001AJZZ) on the left side of the P frame, attach the top cabinet in place.



Fold the FFC at these two locations.

<Preparatory dressing of the FFC>  
Fold the FFC at two locations between the AC head and the main PWB. Pass the FFC through the shielding cover.





## 2-3. CARES WHEN REASSEMBLING

### INSTALLING THE CASSETTE CONTROLLER

When the cassette controller is installed on the mechanism, the initial setting is essential condition. There are two initial setting methods, namely electrical and mechanical.

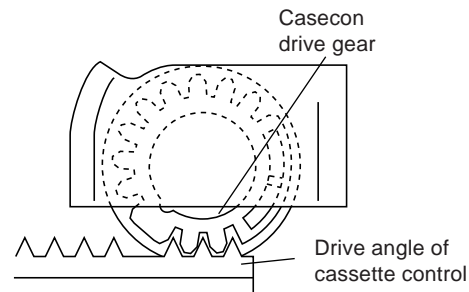
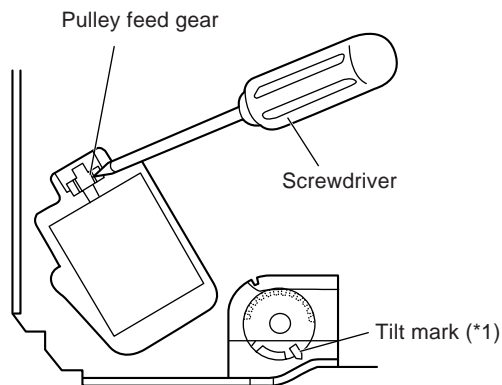
#### 1. Electrical initial setting

So as to perform initial setting of mechanism execute the Step 1 of Installation of cassette housing. After ascertaining the return to the initial setting position (\*1) install the

cassette controller. (Conditions: When mechanism and PWB have been installed)

#### 2. Mechanical initial setting

Feed the pulley feed gear of loading motor with screw driver. After ascertaining the return to the initial set position (\*1) install the cassette controller in the specified position. (This method is applied only for the mechanism.)



### INSTALLING THE MECHANISM ON PWB

Lower vertically the mechanism, paying attention to the mechanism edge, and install the mechanism with due care so that the parts are not damaged. So as to fix the mechanism to the main PWB install 1 screw. (Fix the soldering side of the main PWB as well as some points near the loading motor.) Connect again the FFC cable between the mechanism and the main PWB.

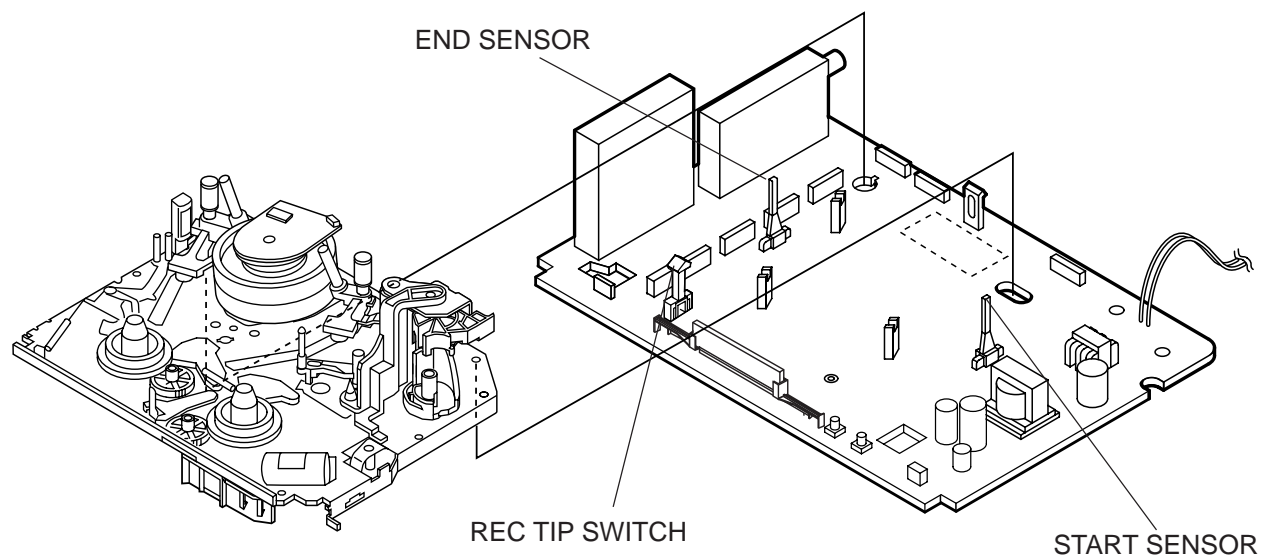
### MOUNTING THE HEAD AMPLIFIER SHIELD

Insert the head amplifier shield to the connector. Tighten up the two screws.

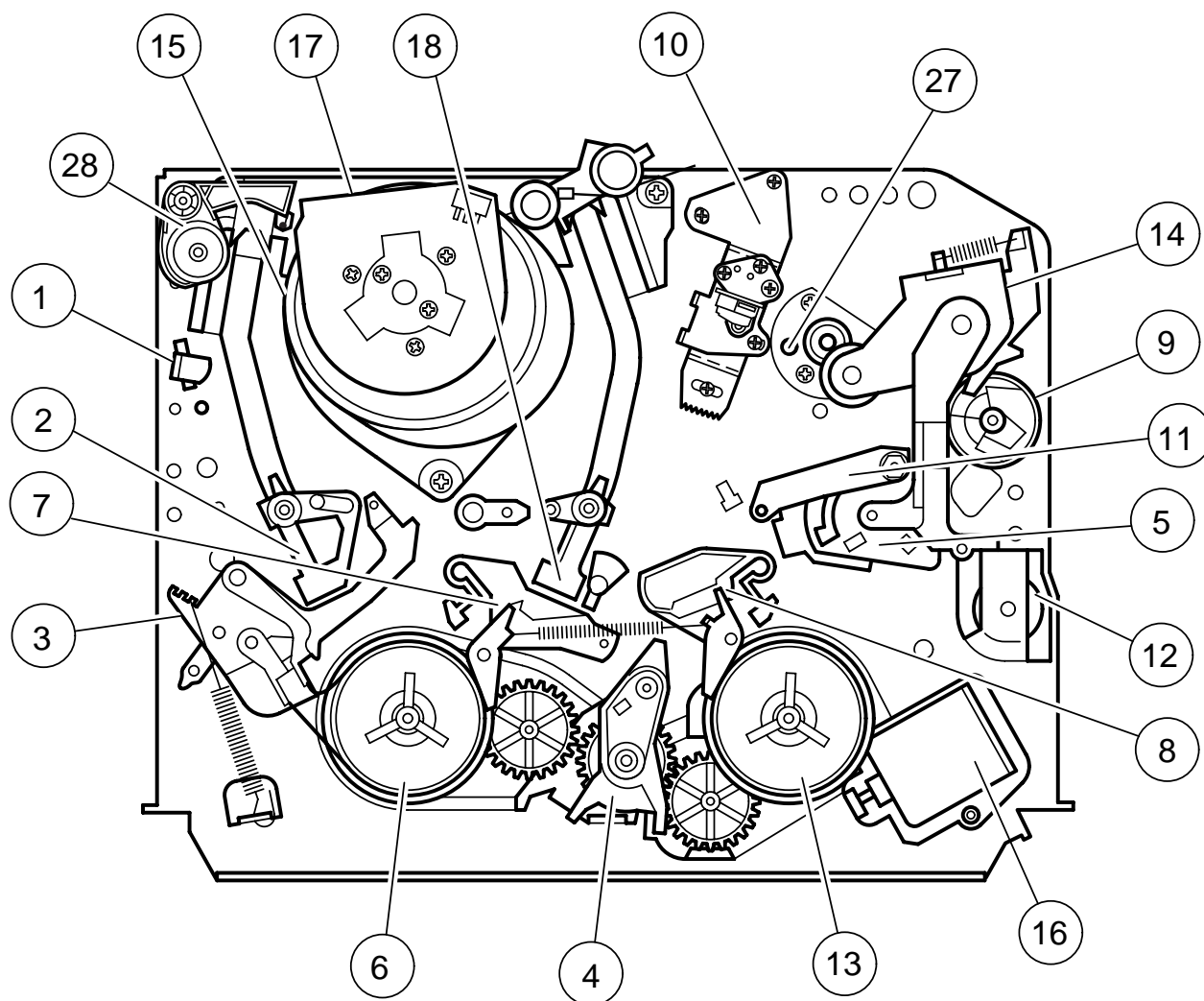
After reassembling the set, perform "A/C HEAD X VALUE ADJUSTMENT" to check the tape drive diversity.

#### PARTS WHICH NEED PARTICULAR CARE

When installing the mechanism chassis on the PWB unit, take care so as to prevent deformation due to contact of mechanism chassis with REC TIP SW.

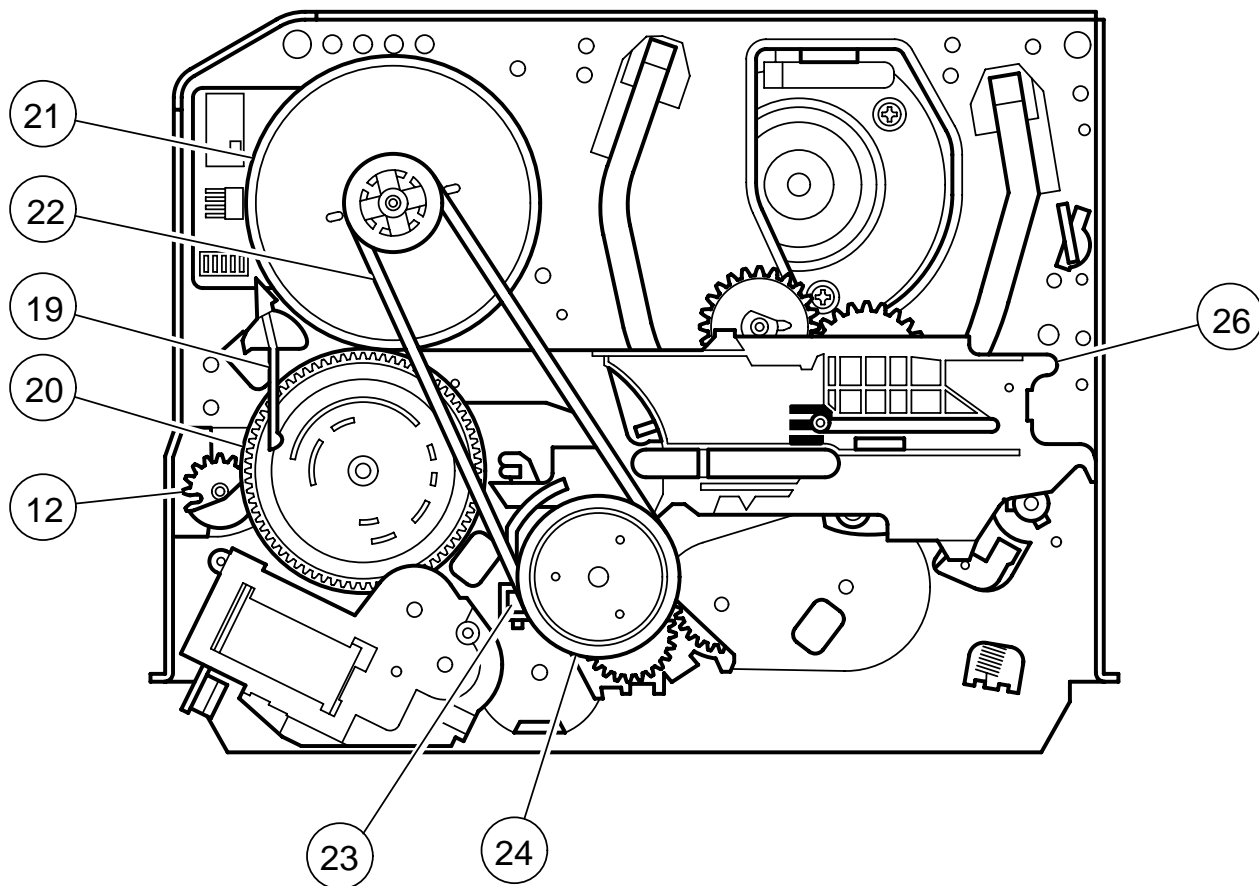


### 3. FUNCTION OF MAJOR MECHANICAL PARTS (TOP VIEW)



No.	Function	No.	Function
1	Full erase head	11	Reverse guide lever ass'y
2	Supply pole base ass'y	12	Casecon drive gear
3	Tension arm ass'y	13	Take-up reel disk
4	Idler wheel ass'y	14	Pinch roller lever ass'y
5	Pinch drive lever ass'y	15	Drum ass'y
6	Supply reel disk	16	Loading motor
7	Supply main brake ass'y	17	Drum motor
8	Take-up main brake ass'y	18	Take-up pole base ass'y
9	Pinch drive cam	27	Fixing guide
10	A/C Head ass'y	28	I roller ass'y

## FUNCTION OF MAJOR MECHANICAL PARTS (BOTTOM VIEW)



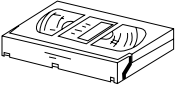





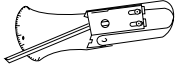

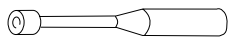


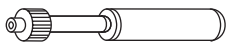

No.	Function	No.	Function
12	Casecon drive gear	22	Reel belt
19	Slow brake	23	Clutch lever
20	Master cam	24	Limiter pulley ass'y
21	Capstan D.D. motor	26	Shifter

## 4. ADJUSTMENT, REPLACEMENT AND ASSEMBLY OF MECHANICAL UNITS

The explanation given below relates to the on-site general service (field service) but it does not relate to the adjustment and replacement which need high-grade equipment, jigs and skill. For example, the drum assembling, replacement and adjustment service must be performed by the person who have finished the technical courses.

### 4-1 MECHANISM CONFIRMATION ADJUSTMENT JIG

So as to perform completely the mechanism adjustment prepare the following special jigs. So as to maintain the initial performance of the machine the maintenance and check are necessary. Utmost care must be taken so that the tape is not damaged. If adjustment needs any jig, be sure to use the required jig.

No.	Jig Item	Part No.	Code	Configuration	Remarks
1.	Torque Cassette Meter	JiGVHT-063	CZ		This cassette torque meter is used for checking and adjusting the torque of take-up for measuring tape back tension.
2.	Torque Gauge	JiGTG0090	CM		These Jigs are used for checking and adjusting the torque of take-up and supply reel disks.
		JiGTG1200	CN		
3.	Torque Gauge Head	JiGTH0006	AW		
4.	Torque Driver	JiGTD1200	CB		When fixing any part to the threaded hole using resin with screw, use the jig. (Specified torque 5 kg)
5.	Master Plane Jig and Reel Disk Height Adjusting Jig	JiGRH0002	BR		These Jigs are used for checking and adjusting the reel disk height.
		JiGMP0001	BY		
6.	Tension Gauge	JiGSG2000	BS		There are two gauges used for the tension measurements, 300 g and 2.0kg.
		JiGSG0300	BF		
7.	Pinch pressing force measuring jig	JiGADP003	BK		This Jig is used with the tension gauge. Rotary transformer clearance adjusting jig.
9.	Reverse guide height adjusting box driver	JiGDRIVER11055	AR		This Jig is used for height adjustment of the reverse guide (for reverse guide height adjustment).
10.	Alignment Tape	VROATSV	CD		
		VROEFZCS			
11.	Guide roller height adjustment drive	JiGDRIVERH-4	AP		This screwdriver is used for adjusting the guide roller height.
12.	X value adjustment gear type screw driver	JiGDRIVER-6	BM		For X value adjustment
13.	Reverse Guide Height Adjusting Jig	JiGRVGH-F18	BU		This Jig is used for height adjustment of the reverse guide.

## MAINTENANCE CHECK ITEMS AND EXECUTION TIME

Perform the maintenance with the regular intervals as follows so as to maintain the quality of machine.

Maintained Parts	500 hrs.	1000 hrs.	1500 hrs.	2000 hrs.	Possible symptom encountered	Remarks
Guide roller ass'y	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lateral noises Head occasionally blocked	Abnormal rotation or significant vibration requires replacement.
Sup Guide Shaft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Clean tape contact part with the specified cleaning liquid.
Retaining guide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Slant pole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Full-erase head	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Color and beating	Clean tape contact area with the specified cleaning liquid.
A/C head	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Small sound or sound distortion	
Upper and lower drum ass'y	<input type="checkbox"/>	<input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="checkbox"/>	Poor S/N ratio, no color Poor flatness of the envelope with alignment tape	
Capstan D.D. Motor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No tape running, uneven color	
Pinch roller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No tape running, tape slack	Clean rubber and rubber contact area with the specified cleaning liquid.
Reel belt		<input type="checkbox"/>		<input type="radio"/>	No tape running, tape slack, no fast forward/ rewind motion	
Tension band ass'y				<input type="radio"/>	Screen swaying	
Loading Motor				<input type="radio"/>	Cassette not loaded or unloaded	
Idler ass'y				<input type="radio"/>	No tape running, tape slack	
Limiter pulley		<input type="checkbox"/> <input type="triangle"/>		<input type="checkbox"/> <input type="radio"/>		
Supply/take-up Main brake levers				<input type="radio"/>	Tape slack	
AHC (Automatic Head Cleaner)		<input type="radio"/>		<input type="radio"/>		Replace the roller of the cleaner when it wears down. Just change the AHC roller assembly for new one.

NOTE    ☐: Part replacement.    ☐: Cleaning    : Apply grease

<Specified> Cleaning liquid Industrial ethyl alcohol

\* This mechanism does not need electric adjustment with variable resistor. Check parts. If any deviation is found, clean or replace parts.

## REMOVING AND INSTALLING THE CASSETTE HOUSING

### • Removal

1. In the cassette removing mode remove the cassette.
2. Unplug the power cord.
3. Remove in the following numerical order.
  - a) Remove two screws ①.
  - b) Slide and pull up the cassette housing control.

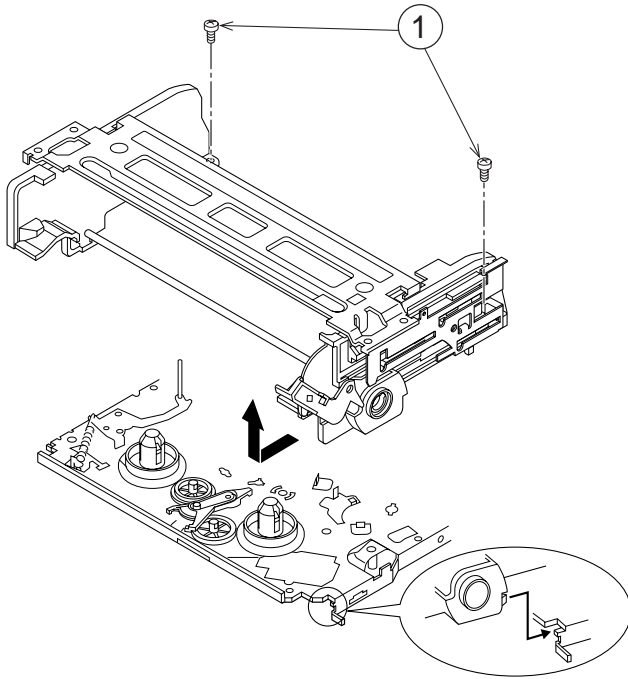


Figure 4-1.

### • Reassembly

1. Before installing the cassette housing control, short-circuit P803 provided at the center (when facing to the main PWB), press the eject button. The casecon drive gear turns and stops when the positioning mark appears. Engage two teeth of casecon drive gear with the three teeth of casecon drive angle gear, and set on the mechanism chassis as shown below.

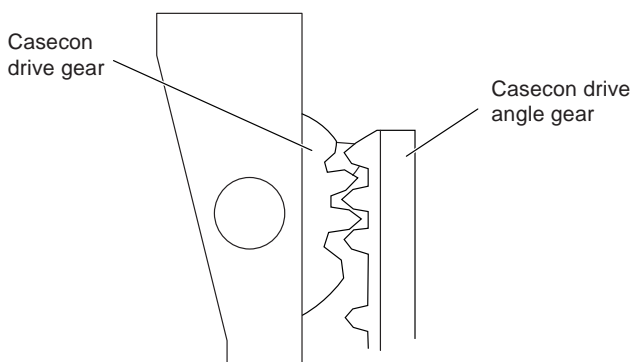


Figure 4-2.

### Notes:

1. When fitting the S/E sensor holder to the cassette controller frame L/R, take care.
2. Misengagement of teeth of casecon drive gear and drive angle gear causes malfunction. (The cassette cannot be set, load and ejection are repeated).
3. In the case when you use the magnet screw driver, never approach the magnet driver to the A/C head, FE head, and drum.
4. When installing or removing, take care so that the cassette housing control and tool do not contact the guide pin or drum.
5. After installing the cassette housing control once perform cassette loading operation.

## TO RUN A TAPE WITHOUT THE CASSETTE HOUSING CONTROL ASSEMBLY

1. Remove the full-surface panel.
2. Short-circuit P803.
3. Plug in the power cord.
4. Turn off the power switch.  
(The pole bases move into U.L. position.)
5. Open the lid of a cassette tape by hand.
6. Hold the lid with two pieces of vinyl tape.
7. Set the cassette tape in the mechanism chassis.
8. Stabilize the cassette tape with a weight (500g) to prevent floating.
9. Turn on the power switch.
10. Perform running test.

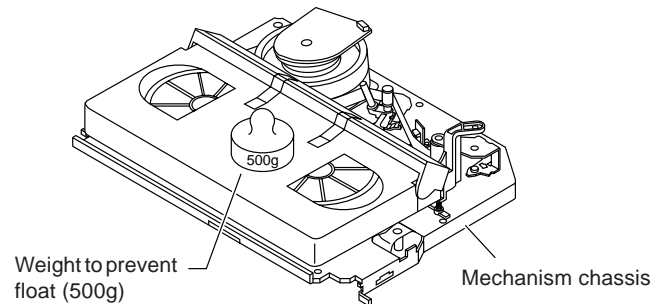


Figure 4-3.

### Note:

The weight should not be more than 500g.

To take out the cassette tape.

1. Turn off the power switch.
2. Take out the cassette tape.

2. Install in the reverse order of removal.



## REEL DISK REPLACEMENT AND HEIGHT CHECK

### • Removal

1. Remove the cassette housing control assembly.
2. Pull the tension band out of the tension arm ass'y.
3. Remove the Supply/Take-up main brake ass'y.
4. Open the hook at the top of the reel disk, and remove the reel disk.

### Note:

Take care so that the tension band ass'y and main brake ass'y (especially soft brake) are not deformed.

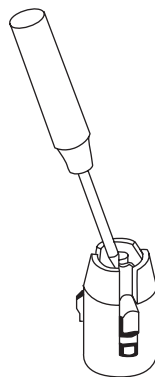
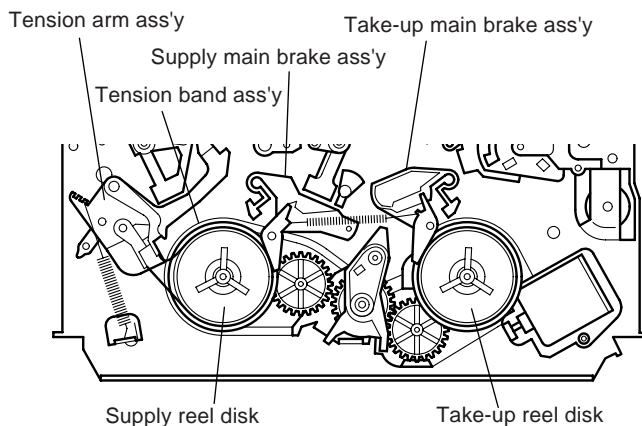


Figure 4-4.

### Note:

When the tension band ass'y is pressed in the direction of the arrow for removal, the catch is hard to be deformed.

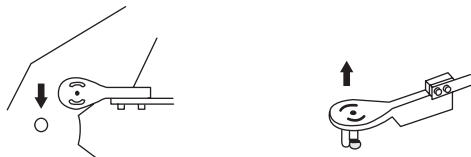


Figure 4-5.

### • Reassembly (Supply reel disk)

1. Clean the reel disk shaft and apply grease (SC-141) to it.
2. Match the phases of reel disk and reel relay gear, and set the new reel disk.
3. After checking the reel disk height, wind the tension band ass'y around the reel disk, and insert into the hole of tension arm ass'y.

4. Assemble the Supply main brake ass'y.

### Notes:

1. When installing the reel disk, take due care so that the tension band ass'y is not deformed and grease does not adhere.
2. Do not damage the Supply main brake ass'y. Be careful so that grease does not adhere to the brake surface.

### • Reassembly (Take-up reel disk)

1. Clean the reel disk shaft and apply grease (SC-141) to it.
2. Align the phase of the reel disk to that of the reel relay gear and to install a new take-up reel disk onto the shaft.
3. Check the reel disk height and reassemble the take-up main brake ass'y.

### Note:

1. Take care so that the Take-up main brake ass'y is not damaged. Take care so that grease does not adhere the brake surface.
2. After reassembly, check the video search rewind back tension (see page 18), and check the brake torque (see page 20).

### • Height checking and adjustment

#### Note:

1. Set the master plane with due care so that it does not contact the drum.
2. When putting the master plane, shift the reverse guide a little in the loading direction. Care must be taken since excessive shift results in damage.

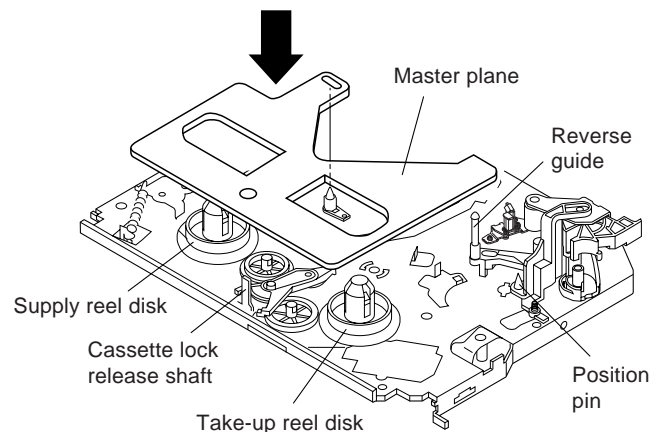


Figure 4-6.

### Note:

Check that the reel disk is lower than part A but higher than part B. If the height is not correct, readjust the reel disk height by changing the poly-slider washer under the reel disk.

**Note:**

Whenever replacing the reel disk, perform the height checking and adjustment.

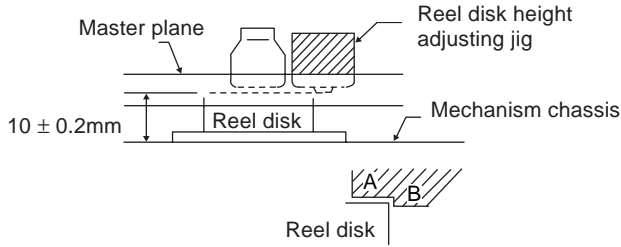


Figure 4-7.

## CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN FAST FORWARD MODE

- Remove the cassette housing control assembly.

- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.

- **Setting**

1. Set a torque gauge to zero on the scale. Place it on the take-up reel disk.
2. Press the FF button.
3. To calculate the remaining capacity of the play back mode, slowly rotate the supply reel disk, and then shift it into the forward mode.

- **Checking**

1. Turn the torque gauge slowly (one rotation every 2 to 3 seconds) by hand in the CW direction.
2. Make sure that the indication of torque gauge is not less than 30mN·m (306gf·cm).

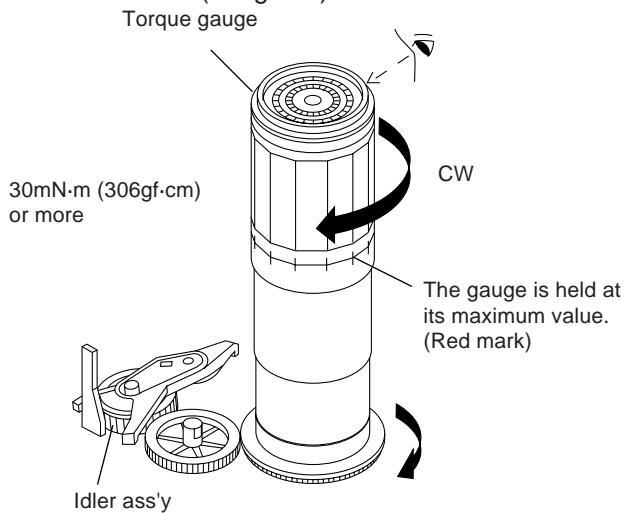


Figure 4-8.

- **Adjustment**

1. If the FF winding-up torque is less than the specified value, clean the capstan D.D. motor pulley, reel belt, and limiter pulley with cleaning liquid, and check again.
2. If the torque is less than the set value, replace the reel belt.

**Notes:**

1. Hold the torque gauge by hand so that it is not moved.
2. Do not keep the reel disk in lock state. Do not allow long-time measurement.

## CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN REWIND MODE

- Remove the cassette housing control assembly.

- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.

- **Setting**

1. Set a torque gauge to zero on the scale. Place it on the supply reel disk.
2. Press the rewind button.
3. To calculate the remaining capacity, slowly rotate the take-up reel disk, and then shift it into the rewind mode.

- **Checking**

1. Turn the torque gauge slowly (one rotation every 2 to 3 seconds) by hand in the CCW direction.
2. Make sure that the indication of torque gauge is not less than 30mN·m (306gf·cm).

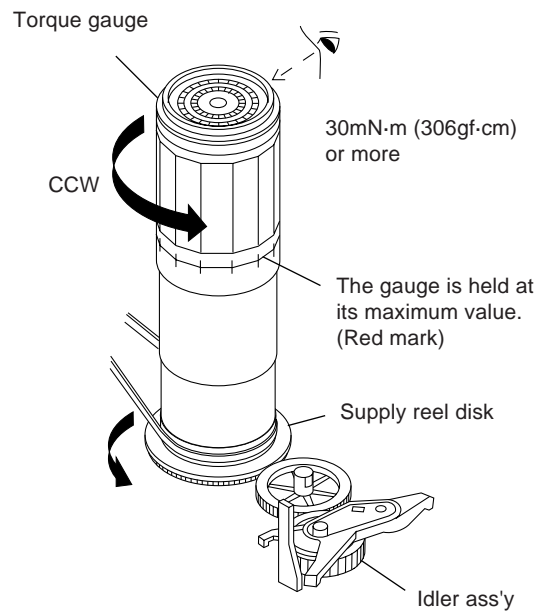


Figure 4-9.

- **Adjustment**

1. If the rewind winding-up torque is less than the specified value, clean the capstan D.D. motor pulley, drive belt, and limiter pulley with cleaning liquid, rewind again, and check the winding-up torque.
2. If the winding-up torque is still out of range, replace the drive belt.

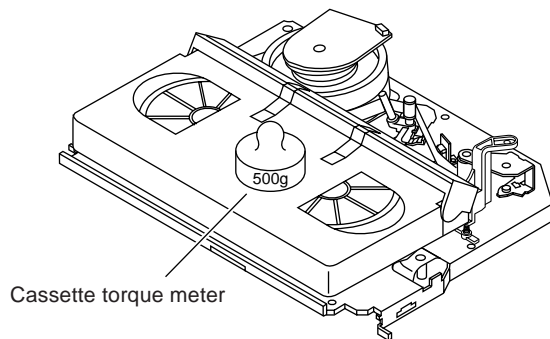
**Notes:**

1. Hold the torque gauge by hand so that it is not moved.
2. Do not keep the reel disk in lock state. Do not allow long-time measurement.

**CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN RECORD/PLAYBACK MODE**

- Remove the cassette housing control assembly.
- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.
- Turn off the power switch.
- Open the cassette torque meter lid, and fix it with tape.
- Load the cassette torque meter into the unit.
- Put the weight (500g) on the cassette torque meter.
- Turn on the power switch.
- Press the REC button, and set EP picture record mode.

Set value  $EP6.9 \pm 2.5\text{mN}\cdot\text{m}$  ( $70 \pm 25\text{gf}\cdot\text{cm}$ )



**Figure 4-10.**

**• Checking**

1. Make sure that value is within the setting  $6.9 \pm 2.5\text{mN}\cdot\text{m}$  ( $70 \pm 25\text{gf}\cdot\text{cm}$ ).
2. The winding-up torque fluctuates due to variation of rotation torque of limiter pulley ass'y. Read the center value of fluctuation as setting.
3. Set the EP record mode and make sure that the winding-up torque is within setting.

**• Adjustment**

If the playback winding-up torque is not within the setting, replace the limiter pulley assembly.

**Note:**

When the torque cassette is set, put a weight (500g) to prevent rise.

When the cassette torque meter is taken out.

Turn off the power switch.

**CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN VIDEO SEARCH REWIND MODE**

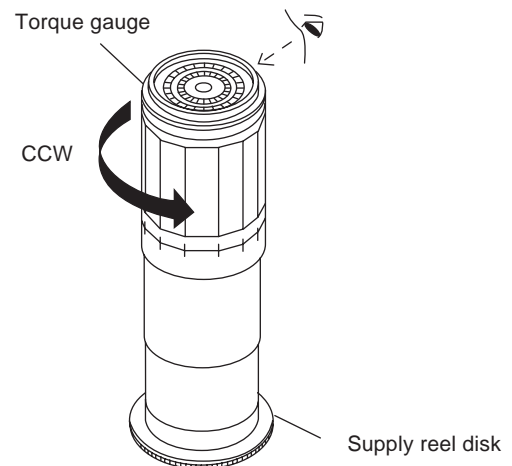
- Remove the cassette housing control assembly.
- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.

**• Setting**

Press the playback button and rewind button to set the video search rewinding mode.

**• Checking**

Place the torque gauge on the supply reel disk, and turn it counterclockwise very slowly (one rotation every 1 to 2 seconds) and check that the torque is within the set value  $14.0 \pm 3.9\text{mN}\cdot\text{m}$ . ( $144 \pm 40\text{gf}\cdot\text{cm}$ )



**Figure 4-11.**

**Note:**

Surely put the torque gauge on the reel disk to measure. If the torque gauge is raised, accurate measurement is impossible.

**• Adjustment**

If the rewinding playback winding-up torque is not within the setting, replace the limiter pulley assembly.

**Note:**

The winding-up torque fluctuates due to variation of rotation torque of supply reel disk. Read the center value of fluctuation as setting.

## CHECKING THE VIDEO SEARCH REWIND BACK TENSION

- Remove the cassette housing control assembly.
- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.
- Checking**
  - After pressing the play button, press the rewind button, and set the video search rewind mode.
  - Place the torque gauge on the take-up reel disk, and turn it counterclockwise very slowly (one rotation every 2 to 3 seconds) and check that the torque is within the set value  $3.4 \pm 1.5 \text{ mN}\cdot\text{m}$  ( $35 \pm 15 \text{ gf}\cdot\text{cm}$ ).

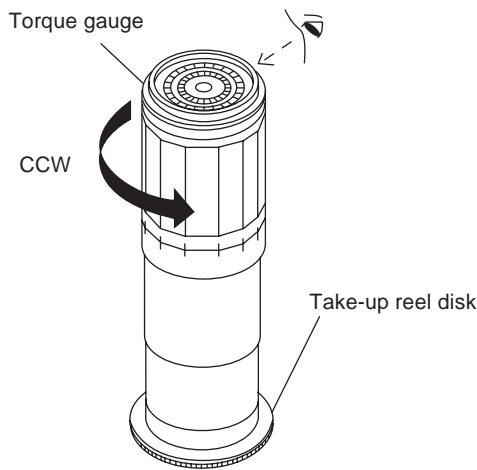


Figure 4-12.

### Notes:

Set the torque gauge securely on the take-up reel disk. If it is not secure, the measurement will be incorrect.

## CHECKING THE PINCH ROLLER PRESSURE

- Remove the cassette housing control assembly.
- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.
- Checking**  
Press the play button to set the playback mode.

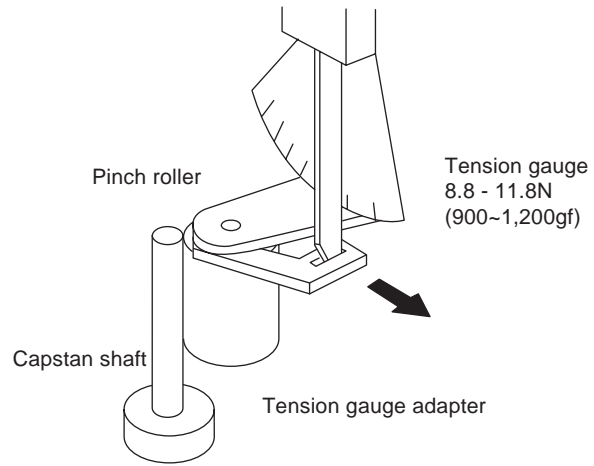


Figure 4-13.

- Detach the pinch roller from the capstan shaft. Do not separate excessively. Or the pinch lever and pinch double action lever may disengage.
- Engage the tension gauge adapter with the pinch roller shaft, and pull in the arrow direction.
- Gradually return the pinch roller, and measure the pulling force when the pinch roller contacts the capstan shaft.
- Make sure that the measured value is within setting 8.8 to 11.8 N (900 to 1,200gf).

## CHECKING AND ADJUSTMENT OF TENSION POLE POSITION

- Remove the cassette housing control assembly.
- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.
- Setting**
  - Turn off the power switch.
  - Open the cassette tape (T-120), and fix with tape.
  - Set the cassette tape in loading state.
  - Put the weight (500g) on the cassette tape.
  - Turn on the power switch.

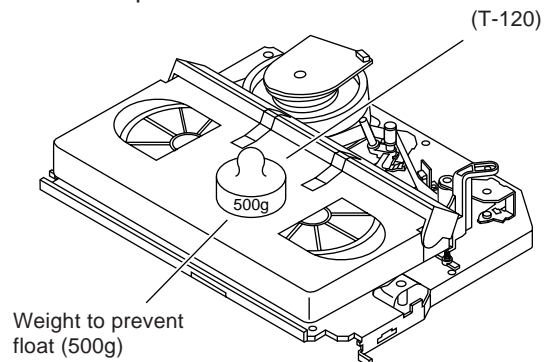
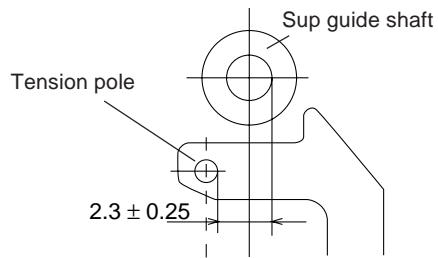


Figure 4-14.

- Make the adjustment with the beginning of a T-120 tape.
- Checking**
  - Set a cassette tape, push the REC button to place the unit in the SP record mode. Now check the tension pole position.

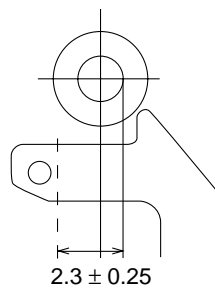
2. Visually check to see if the right edge of the tension pole is within the  $2.3 \pm 0.25$  from the right edge of the Sup guide shaft.



Make the adjustment with the beginning of a T-120 tape.

**Figure 4-15.**

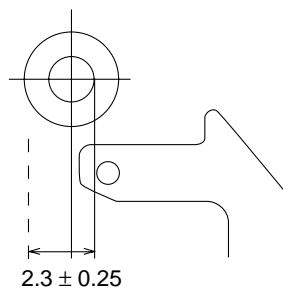
**At left side from the center line**



**Figure 4-16.**

Insert the slotted screwdriver in the tension pole adjuster, and rotate counterclockwise.

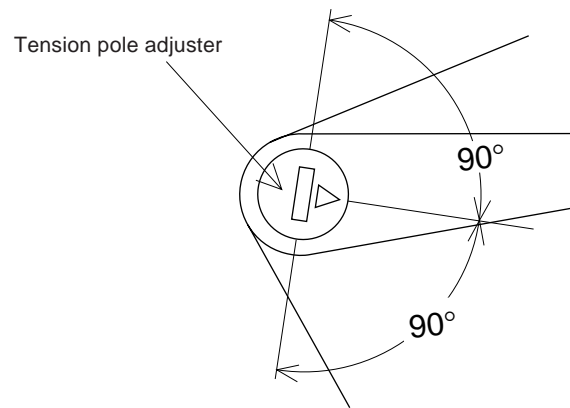
**At right side from the center line**



**Figure 4-17.**

Insert the slotted screwdriver in the tension pole adjuster, and rotate clockwise.

Tension pole adjuster adjusting range

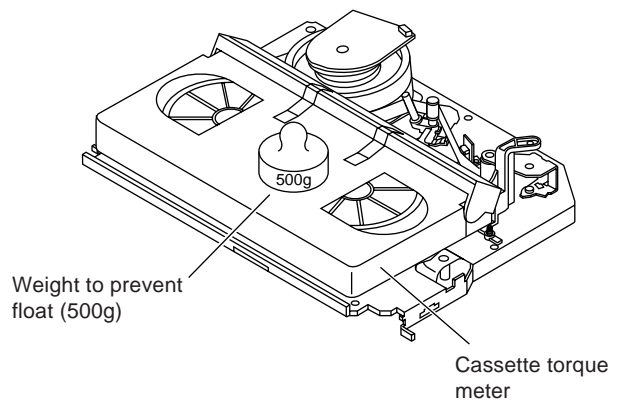


**Figure 4-18.**

Adjust so that the delta mark of tension pole adjuster is within 90° range (left, right).

## CHECKING AND ADJUSTMENT OF RECORD/PLAYBACK BACK TENSION

- Remove the cassette housing control assembly.
- After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.
- **Setting**
  1. Turn off the power switch.
  2. Open the torque cassette meter and fix with tape.
  3. Set the cassette tape in loading state.
  4. Put the weight (500g) on the cassette torque meter.
  5. Turn on the power switch.



**Figure 4-19.**

- **Checking**
  1. Push the REC button to place the unit in the SP record mode.
  2. At this time ascertain that the back tension is within the setting (36 to 56g·cm) by seeing the indication of torque cassette meter.

- **Adjustment**

1. If the indication of torque cassette meter is lower than the setting, shift the tension spring engagement to the part A.
2. If the indication of torque cassette meter is higher than the setting, shift the tension spring engagement to the part B.

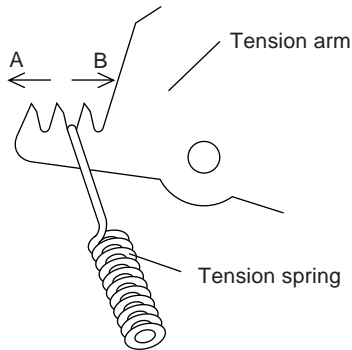
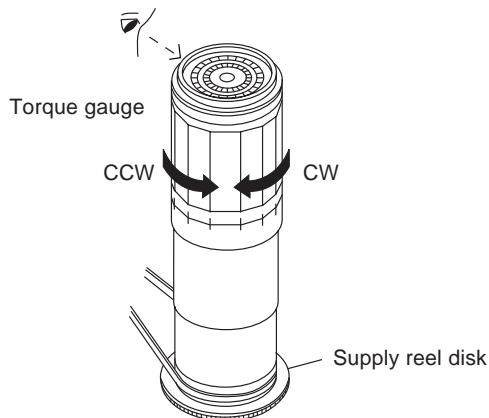


Figure 4-20.

## CHECKING THE BRAKE TORQUE

- **Checking the brake torque at the supply side**



CCW:	3.9~9.8mN·m (40~100gf·cm)
CW:	8.8~23.5mN·m (90~240gf·cm)

Figure 4-21.

- **Remove the cassette housing control assembly.**

- **After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.**

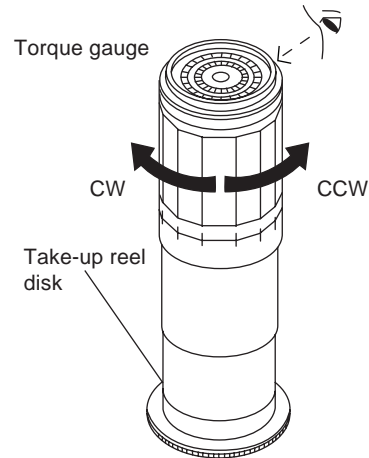
- **Setting**

1. Set a torque gauge to zero on the scale. Place it on the supply reel disk.
2. Switch from the FF mode to the STOP mode.
3. Disconnect the power cord.

- **Checking**

Turn the torque gauge at a rate of about one turn/2 sec in the CW direction/CCW direction with respect to the supply reel disk so that the reel disk and torque gauge pointer rotate at equal speed, and make sure that the value is within the setting (CW direction: 8.8 to 23.5mN·m (90 to 240gf·cm); CCW direction: 3.9 to 9.8mN·m (40 to 100gf·cm)).

- **Checking the brake torque at the take-up side**



CCW:	8.8~23.5mN·m (90~240gf·cm)
CW:	4.9~11.8mN·m (50~120gf·cm)

Figure 4-22.

- **Remove the cassette housing control assembly.**

- **After short-circuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.**

- **Setting**

1. Switch from the FF mode to the STOP mode.
2. Disconnect the power cord.
3. Set a torque gauge to zero on the scale. Place it on the take-up reel disk.

- **Checking**

1. Turn the torque gauge at a rate of about one turn/2 sec in the CCW direction/CW direction so that the reel disk and torque gauge pointer rotates at equal speed and make sure that the value is within the setting (CCW direction: 8.8 to 23.5mN·m (90 to 240gf·cm), CW direction: 4.9 to 11.8 mN·m (50 to 120gf·cm)).

2. Adjustment of the brake torque at the supply side and the take-up side

- Unless the supply side brake torque or take-up side brake torque is within the setting, clean the felt surface of reel disk (supply, take-up) brake lever, check again the brake torque.
- If value cannot be set within the setting yet, replace the main brake ass'y or main brake spring.



## REPLACEMENT OF A/C (Audio/Control) HEAD

1. Remove the cassette housing control assembly.
2. In unloading state unplug the power cord.

### • Removal

1. Remove the screws ① ② ③, Azimuth screw, Tilt screw.
2. Unsolder the PWB fitted to the A/C head.

### Notes:

1. When replacing, never touch the head. If you touched, clean with the cleaning liquid.
2. When removing the screw ③, take care so that the spring may spring out.

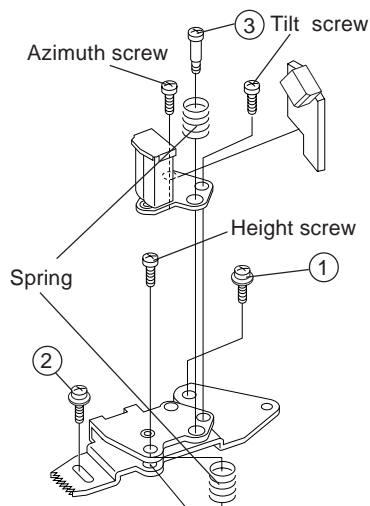


Figure 4-23.

### • Replacement

1. Solder the removed PWB to the new head assembly.
2. Adjust the height from the A/C head plate (lower surface) to the A/C head base to 10.8mm with slide calipers. (3 places of azimuth screw section, tilt screw section and height screw section) (See the figure below.)

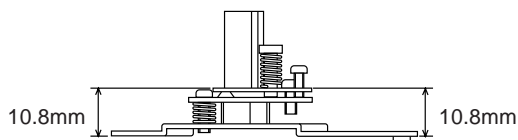
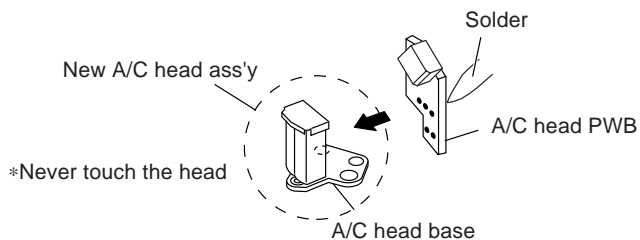


Figure 4-24.

3. Align the left end of gear of A/C head plate with the punched mark of chassis, tentatively tighten the screws plate ① and ② so as to ensure smooth motion of A/C head plate. Tentative tightening torque must be 0.15 to 0.20 N·m (1.5 to 2.0kgf·cm).

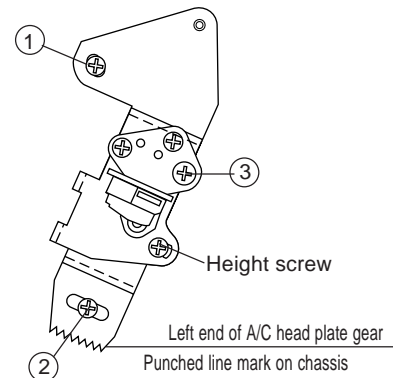


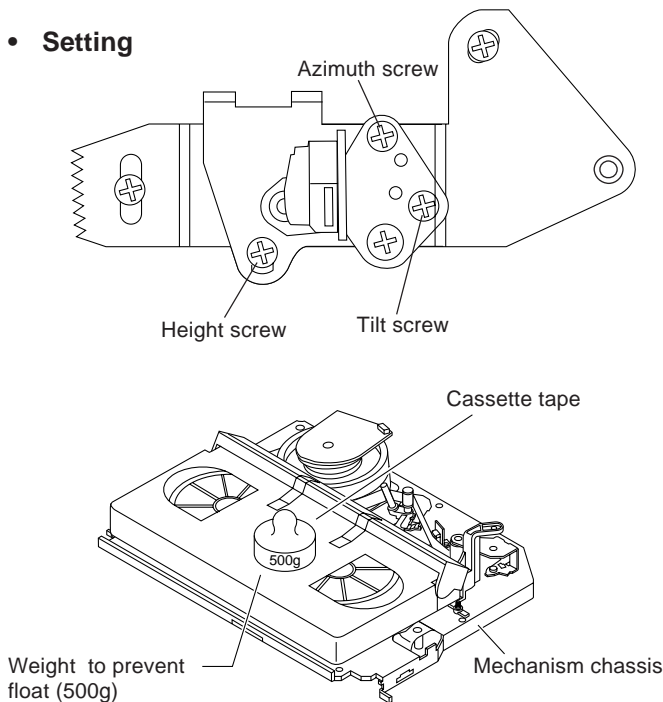
Figure 4-25.

### Note:

1. If the screws ① and ② are tightened tentatively too loose, the azimuth and height of A/C head may change when they are finally tightened. Therefore care must be taken.
2. After completion of A/C head be sure to adjust tape running. (Execute the running adjustment by the method described in Page 23, 24.)

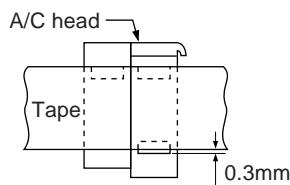
## A/C HEAD HEIGHT ROUGH ADJUSTMENT

### • Setting



**Figure 4-26.**

1. Set the cassette tape in the unit.
2. Press the PLAY button to put the unit in the playback mode.
3. Roughly adjust the height of the A/C head by turning the height screw until the tape is in the position shown below.



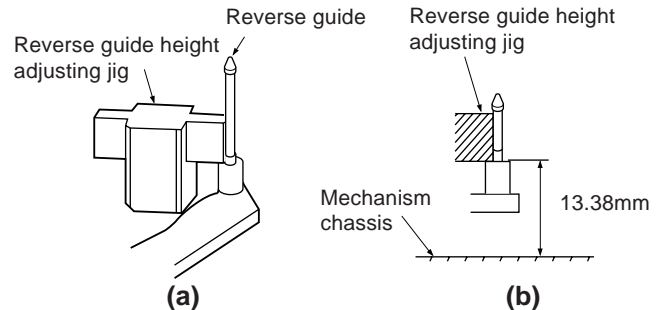
**Figure 4-27.**

### • Adjustment

Adjust the height screw visually so that the control head is visible 0.3mm below the bottom of the tape.

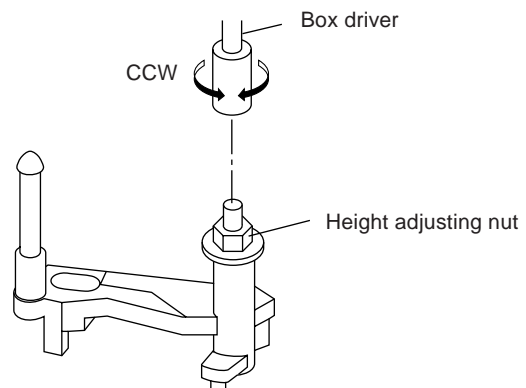
## HEIGHT ADJUSTMENT OF REVERSE GUIDE

1. Adjust the height from the mechanism chassis to the reverse guide lower flange to 13.38 mm, using the reverse guide height adjustment jig, in tape loading state. (Refer to Figure 4-28 (a) (b).)



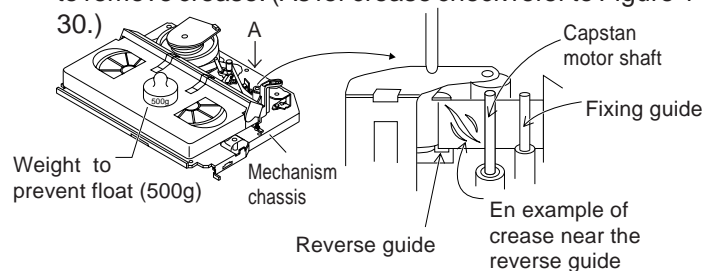
**Figure 4-28.**

2. Rotate counterclockwise the reverse guide height adjustment nut 1/10 turn. (For height adjustment use the reverse guide height adjustment box driver (JiGDRIVER 11055)).



**Figure 4-29.**

3. Set the tape, and check for tape crease near the reverse guide in the playback mode. If crease is found, turn the reverse guide adjustment nut to remove crease. (As for crease check refer to Figure 4-30.)

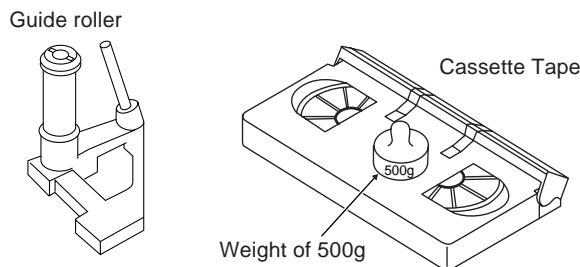


\* Check for crease from the A direction.

**Figure 4-30.**

## ADJUSTMENT OF TAPE DRIVE TRAIN

1. Tape run rough adjustment
  - ① Remove the cassette housing control assembly.
  - ② After shortcircuiting P803 provided at the right of display tube on the operation PWB, plug in the power cord.
  - ③ Check and adjust the position of the tension pole. (See page 18.)
  - ④ Check and adjust the video search rewind back tension. (See page 18.)
  - ⑤ Connect the oscilloscope to the test point for PB CHROMA envelope output (TP301). Set the synchronism of the oscilloscope to EXT. The PB CHROMA signal is to be triggered by the head switching pulse (TP302).
  - ⑥ Set the alignment tape (VROATSV) to play. (Put a 500g weight on the cassette tape to prevent lift of cassette tape.)

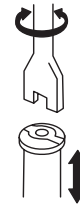


**Figure 4-31.**

- ⑦ Press the tracking button (+), (-) and change the envelope waveform from max to min and from min to max. At this time make sure that the envelope waveform changes nearly parallel.
- ⑧ Unless the envelope waveform changes nearly parallel, adjust the height of supply side and take-up side guide roller so that the envelope waveform changes nearly parallel. (For envelop adjustment procedure refer to Figure 4-35.)
- ⑨ Turn the tilt screw to remove the tape crease at the fixing guide flange.  
Play back the tape and check for tape crease at the fixing guide flange.
  - (1) If there is no tape crease  
Turn the tilt screw clockwise so that tape crease appears once at the flange, and then return the tilt screw so that the crease disappears.
  - (2) If there is tape crease  
Turn counterclockwise the tilt screw so that the tape crease disappears.  
(Reference) If the tilt screw is turned clockwise crease appears at the lower flange.

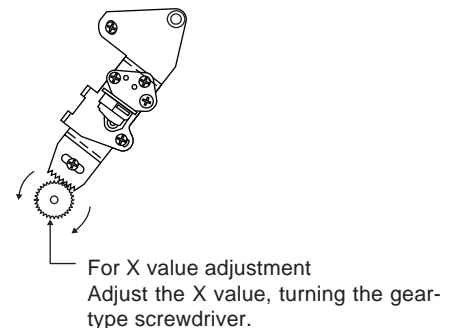
### Notes:

1. Previously set the tracking control in the center position, and adjust the envelop waveform to maximum with X value adjustment nut. Thereby the tape run rough adjustment is facilitated.
2. Especially the outlet side envelope waveform must have higher flatness.



**Figure 4-32.**

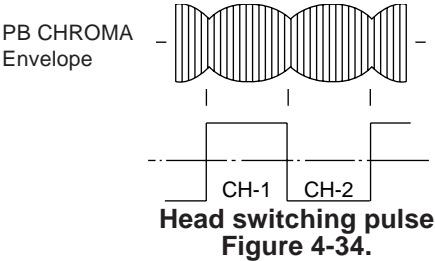
2. Adjustment of A/C head height and azimuth
  - ① Perform the initial setting of A/C head position by the method stated in "Page 21 Replacement 3".
  - ② Connect the oscilloscope to the audio output terminal.
  - ③ Using the alignment tape in which 1 kHz linear audio signal has been recorded, adjust the height screw so as to get max audio output.
  - ④ Using the alignment tape in which 7 kHz linear audio signal has been recorded, adjust the azimuth screw so as to get max audio output.
  - ⑤ Repeat the above adjustment steps ③ and ④ a couple of times. Finally take the step ④ again.



**Figure 4-33.**

3. Tape run adjustment

- ① Connect the oscilloscope to PB CHROMA envelope output test point, set oscilloscope sync to EXT, trigger-input the PB CHROMA signal (head switching pulse).
- ② Rough adjustment of X value  
Tentatively fix A/C head arm screws ① and ② by the method described in Page 21 "Replacement 3". Play back the alignment tape, and press S803 located at the right of display tube on the operation PWB. As a result the auto-tracking is automatically cancelled, so that the X value adjustment mode is set.  
Move the A/C head with the X value adjustment gear driver (JiGDRIVER-6) by the method shown in Figure 4-33, and adjust the A/C head so as to get the maximum envelope waveform. (Note: When the A/C head is adjusted, adjust so that the maximum envelope waveform is obtained nearest the position of initial setting made in Page 24.)
- ③ Next, press the tracking button (+), (-) and change the envelope waveform from max to min and from



- min to max. At this time adjust the height of supply and take-up side guide roller with the adjustment driver (JiGDRIVERH-4) so that the envelope waveform changes nearly parallel.
- ④ If the tape is lifted or sunk from the helical lead surface, the PB CHROMA envelope waveform appears as shown in Figure 4-35.
  - ⑤ Press the tracking button (+), (-) and make sure that the envelope waveform changes nearly parallel.
  - ⑥ Finally check tape crease near the reverse guide. If tape crease is found, remove it as stated in Page 22 "HEIGHT ADJUSTMENT OF REVERSE GUIDE" item 3.

	When the tape is above the helical lead.		When the tape is below the helical lead.	
	Supply side	Take-up side	Supply side	Take-up side
Adjustment	Supply side guide roller rotated in clockwise direction (lowers guide roller) to flatten envelope.	Take-up side guide roller rotated in clockwise direction (lowers guide roller) to flatten envelope.	Supply side guide roller rotated in counterclockwise direction (raises guide roller) to make the tape float above the helical lead. The supply side guide roller is then rotated in the clockwise direction to flatten the envelope.	Take-up side guide roller rotated in counterclockwise direction (raises guide roller) to make the tape float above the helical lead. The take-up side guide roller is then rotated in the clockwise direction to flatten the envelope.

Figure 4-35.

4. A/C head X value adjustment

- ① Tentatively fix A/C head arm screws ① and ② by the method described in Page 21 "Replacement 3".
- ② Playback the alignment tape , and press S803 located at the right of display tube on the operation PWB. As a result the auto-tracking is automatically cancelled, so that the X value adjustment mode is set.
- ③ Move the A/C head with the X value adjustment gear driver by the method shown in Figure 4-33, and adjust the A/C head so as to get the maximum envelope waveform. (Note: At this time adjust so as to get the maximum envelope waveform nearest the A/C head position which has been set in case of X value rough adjustment as stated in Page 24, 3- ②.)
- ④ Tighten finally the screws ① and ②. Be sure to

- tighten at first the screw ① and then the screw ②. Final tightening torque is 0.6N·m (If the screw ② is tightened first, the X value may deviate.)
- ⑤ Adjust the playback switching point (Refer to the electric adjustment method.)
  - ⑥ Playback the self-picture-recorded tape, and check the flatness of envelope waveform and sound.

**Note:**  
When the A/C head X value adjustment is performed, be sure to perform at first X value rough adjustment (refer to Page 24, 3-②).

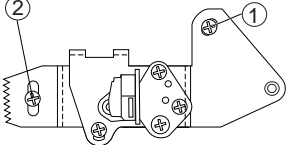


Figure 4-36.

## REPLACEMENT OF THE CAPSTAN D.D. (DIRECT DRIVE) MOTOR

- Remove the mechanism from the main PWB (refer to Page 8 "1. When removing the mechanism from the main PWB").
- Removal (Follow the order of indicated numbers.)**
  1. Remove the reel belt ①.

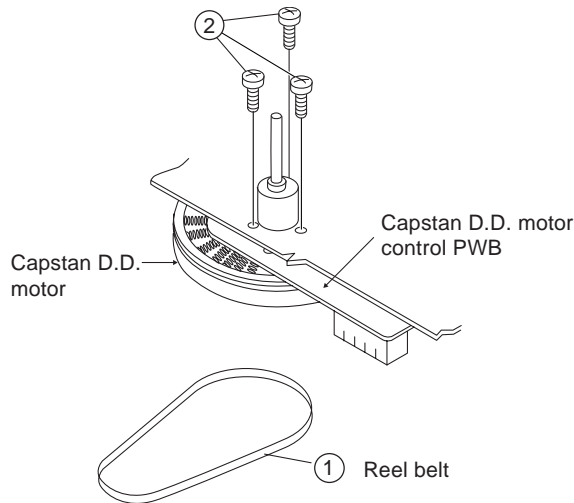


Figure 4-37.

2. Remove the three screws ②.

### • Reassembly

1. Taking care so that the capstan shaft does not contact the mechanism chassis, set its position on the mechanism chassis, and then install with the three screws.
2. Install the reel belt.

### Notes:

1. After installing the capstan D.D. motor, be sure to rotate the capstan D.D. motor and check the movement.
2. Set the tape, and check for the tape crease near the reverse guide in the playback mode. Adjust the A/C head and azimuth as stated in Page 23 item 2. If crease is found, adjust as stated in Page 24 "HEIGHT ADJUSTMENT OF REVERSE GUIDE".

## REPLACEMENT OF DRUM D.D. MOTOR

1. Set the ejection mode.
2. Withdraw the main power plug from the socket.

### • Removal (Perform in numerical order.)

1. Disconnect the FFC cable ①.
2. Unscrew the D.D. stator assembly fixing screws ②.
3. Take out the D.D. stator assembly ③.
4. Unscrew the D.D. rotor assembly fixing screws ④.
5. Take out the D.D. rotor assembly ⑤.

### Notes:

1. In removing the D.D. stator assembly, part of the drum earth spring pops out of the pre-load collar. Be careful not to lose it.
2. Install, so that the D.D. rotor ass'y and upper drum ass'y mounting direction check holes align. (Align the upper drum dent with the rotor hole.)
3. Be careful not to damage the upper drum or the video head.
4. Protect the hole elements from shock due to contact with D.D. stator or D.D. rotor ass'y.
5. After installation adjust the playback switching point for adjustment of servo circuit.

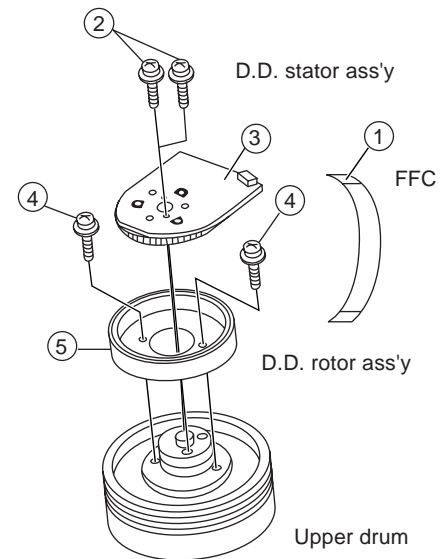


Figure 4-38.

## REPLACING THE UPPER AND LOWER DRUM ASSEMBLY

- Replacement (Perform in the numerical order)
  - ① Remove the motor as stated in Page 25 D.D. motor replacement.
  - ② Remove the drum earth brush ②.
  - ③ Remove the drum base ③ from the upper and lower drum assembly ①.

### [Cares when replacing the drum]

1. Be careful so that the drum earth brush is not lost.
2. Do not touch directly the drum surface.
3. Fit gently the screwdriver to the screws.
4. Since the drum assembly is an extremely precise assembly, it must be handled with utmost care.
5. Make sure that the drum surface is free from dust, dirt and foreign substances.
6. After replacing the drum be sure to perform the tape running adjustment.
  - Playback switching point adjustment
  - X-position adjustment and check
  - Standard and x-3 slow tracking adjustment
7. After replacing the drum clean the drum.

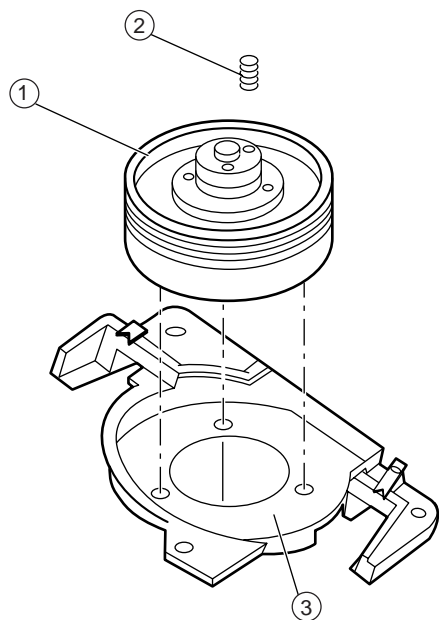


Figure 4-39.

## ASSEMBLING OF PHASE MATCHING MECHANISM COMPONENTS

- Assemble the phase matching mechanism components in the following order.

1. Assemble the pinch roller assembly and pinch drive cam.
2. Mounting the shifter (on the back of the mechanism chassis).
3. Mounting the master cam (on the back of the mechanism chassis).
4. Assemble the connection gear, slow brake and loading motor parts.

- Pinch drive cam and pinch roller assembling method.

(Place the following parts in position in numerical order.)

- (1) Reverse drive lever ①
- (2) Reverse guide spring ②
- (3) Reverse guide lever ass'y ③
- (4) Reverse guide height adjusting nut ④
- (5) Pinch drive cam ⑤
- (6) Pinch roller ass'y ⑥
- (7) Open lever ⑦

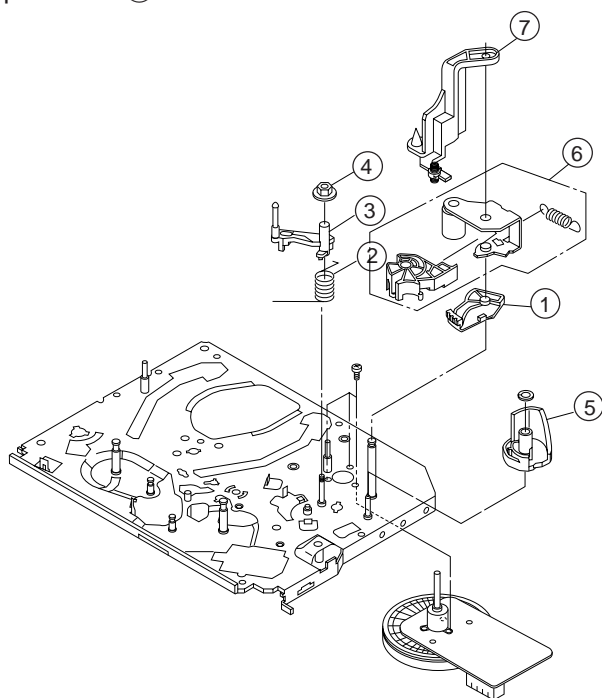
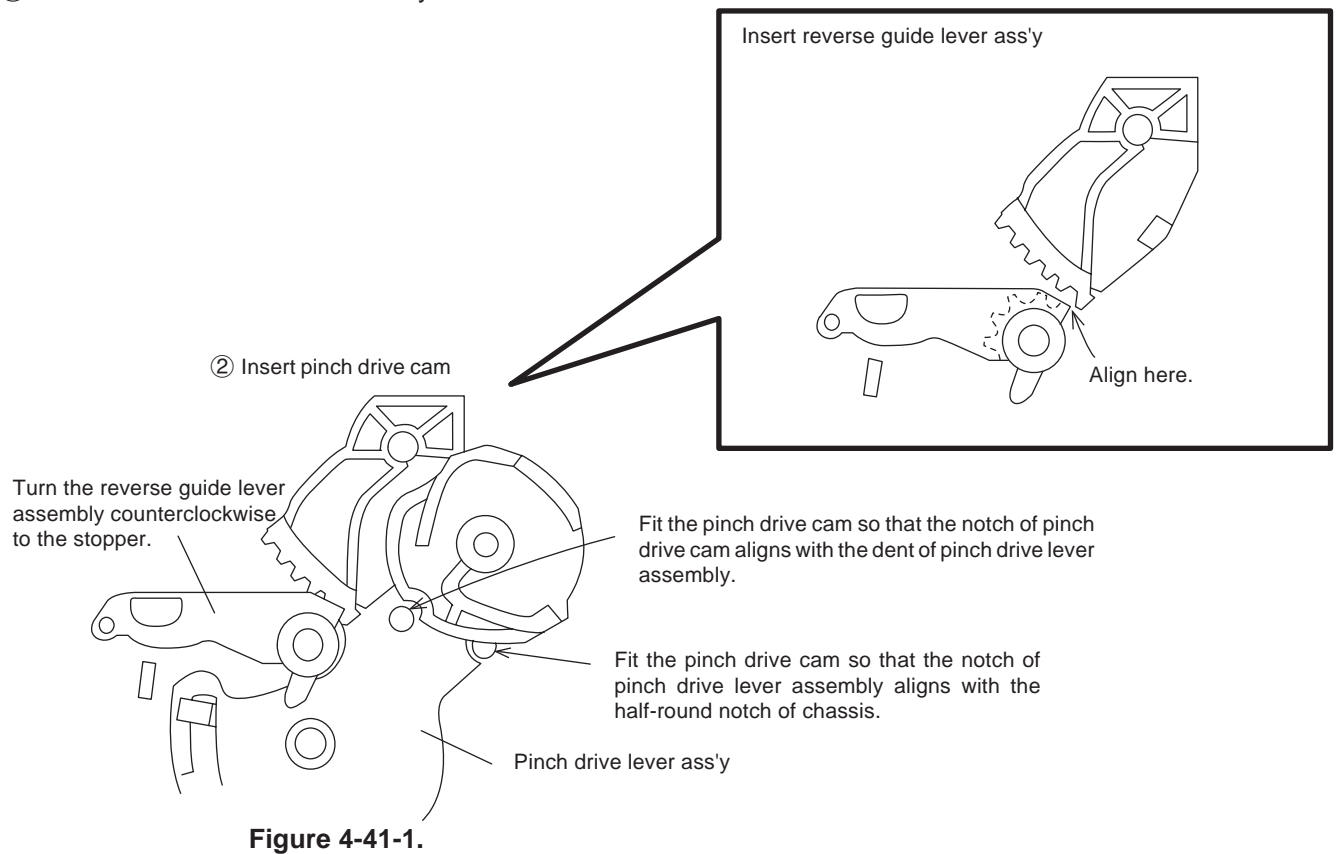


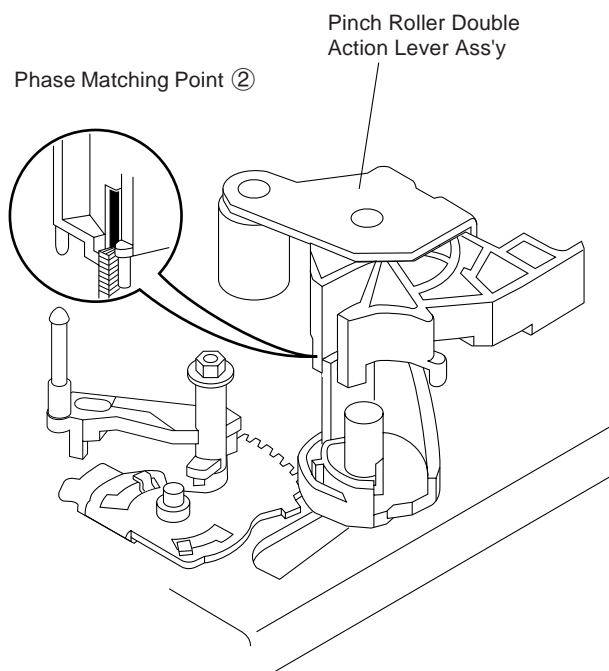
Figure 4-40.



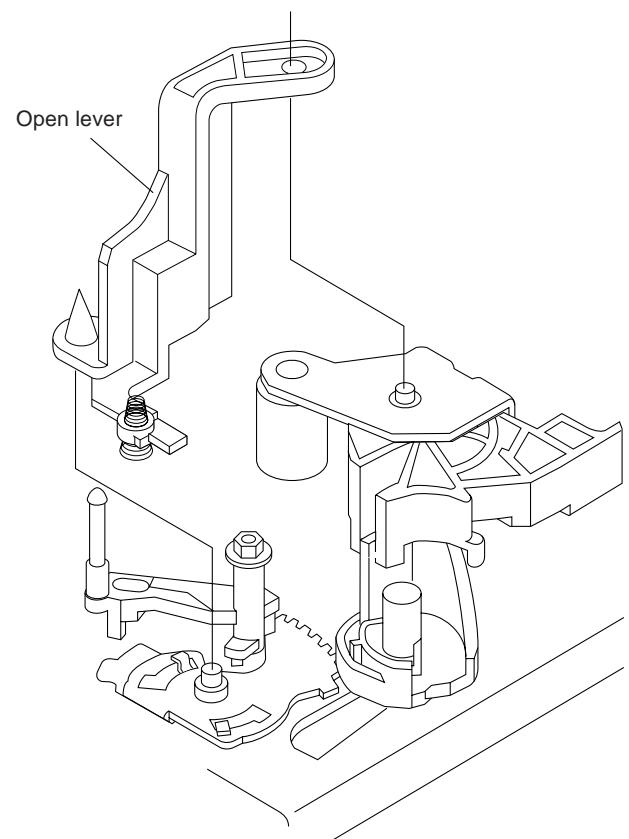
## ① Insert Reverse Guide Lever Ass'y



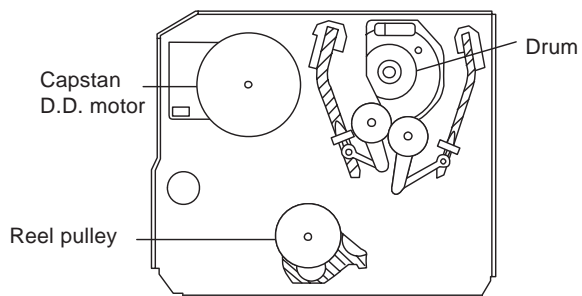
## ② Insert Pinch Roller/Pinch Double Action Lever Ass'y.



## ③ Insert Open Lever.



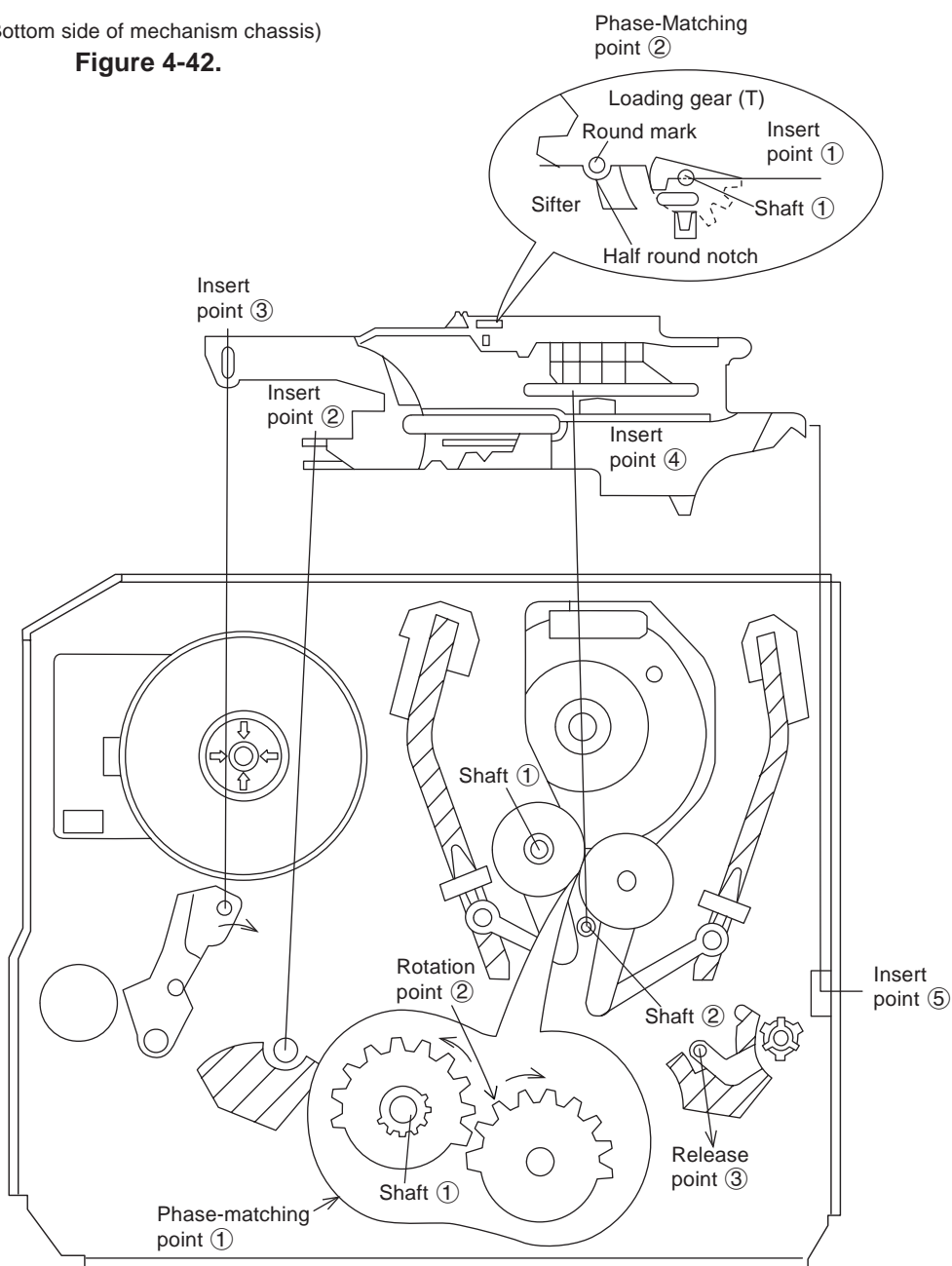
## INSTALLING THE SHIFTER



(Bottom side of mechanism chassis)

**Figure 4-42.**

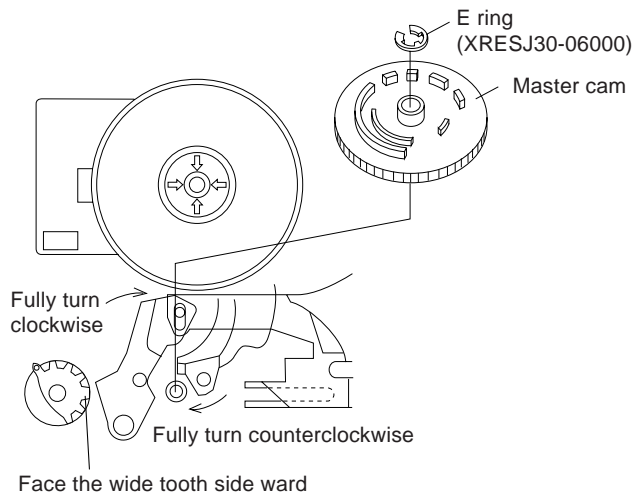
1. Make sure that the loading gear is at the Phase-Matching point ① as shown below.
2. Install, paying attention to ⑤ insertion points and ③ release points.
3. For the phase matching at the insertion point ①, see the Phase-Matching point ② as shown below.
4. Finally fix the inserts ① and ④.



**Figure 4-43.**

## INSTALLING THE MASTER CAM (AT REAR SIDE OF MECHANISM CHASSIS)

1. Make sure beforehand that the shifter is at the point as shown below.
2. Place the master cam in the position as shown below.

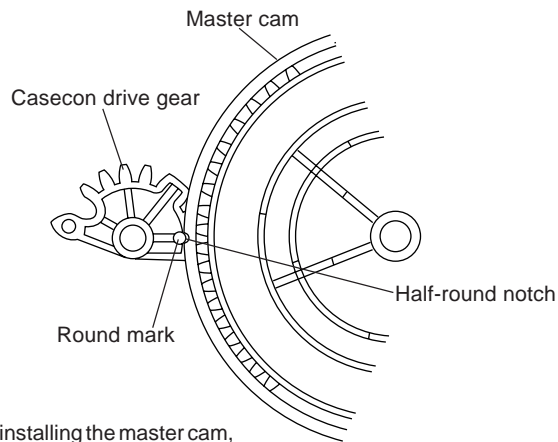


**Figure 4-44-1.**

### Note:

See the figure below for the phase matching between the master cam and the casecon drive gear.

3. Finally fix with the E ring.

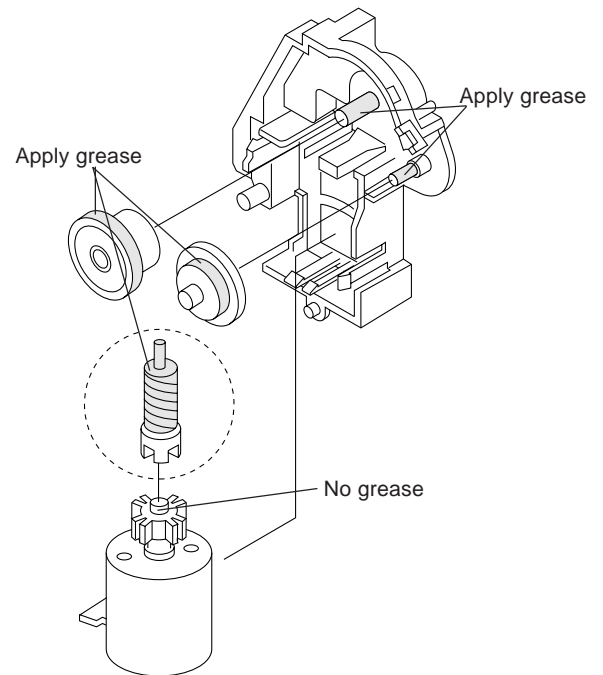


When installing the master cam, align the casecon drive gear round mark with the half-round notch of master cam.

**Figure 4-44-2.**

## REPLACEMENT OF LOADING MOTOR

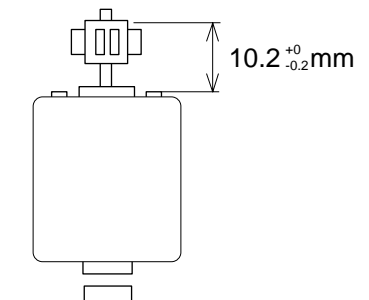
### • Removal



**Figure 4-45.**

### • Replacement

Remove the loading motor, and install the replacement loading motor as shown below.



**Figure 4-46.**

The loading motor pressing-in must be less than 14.7 N (15 gf).

Adjust the distance between motor and pulley to  $10.2^{+0}_{-0.2}$  mm).

ASSEMBLY OF CASSETTE HOUSING

1. Drive Gear and R Drive angle ass'y

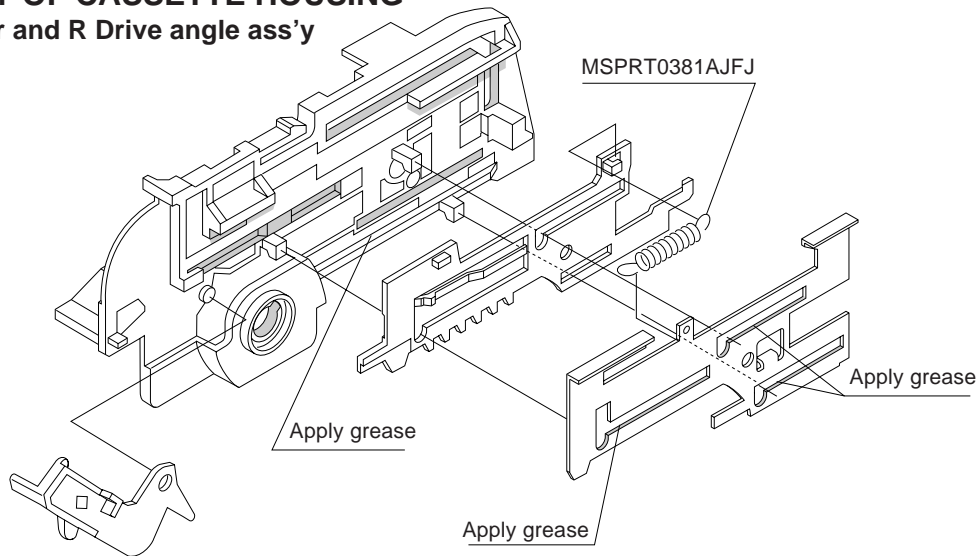


Figure 4-47.

2. Synchro Gear, Drive Gear L and Drive Gear R

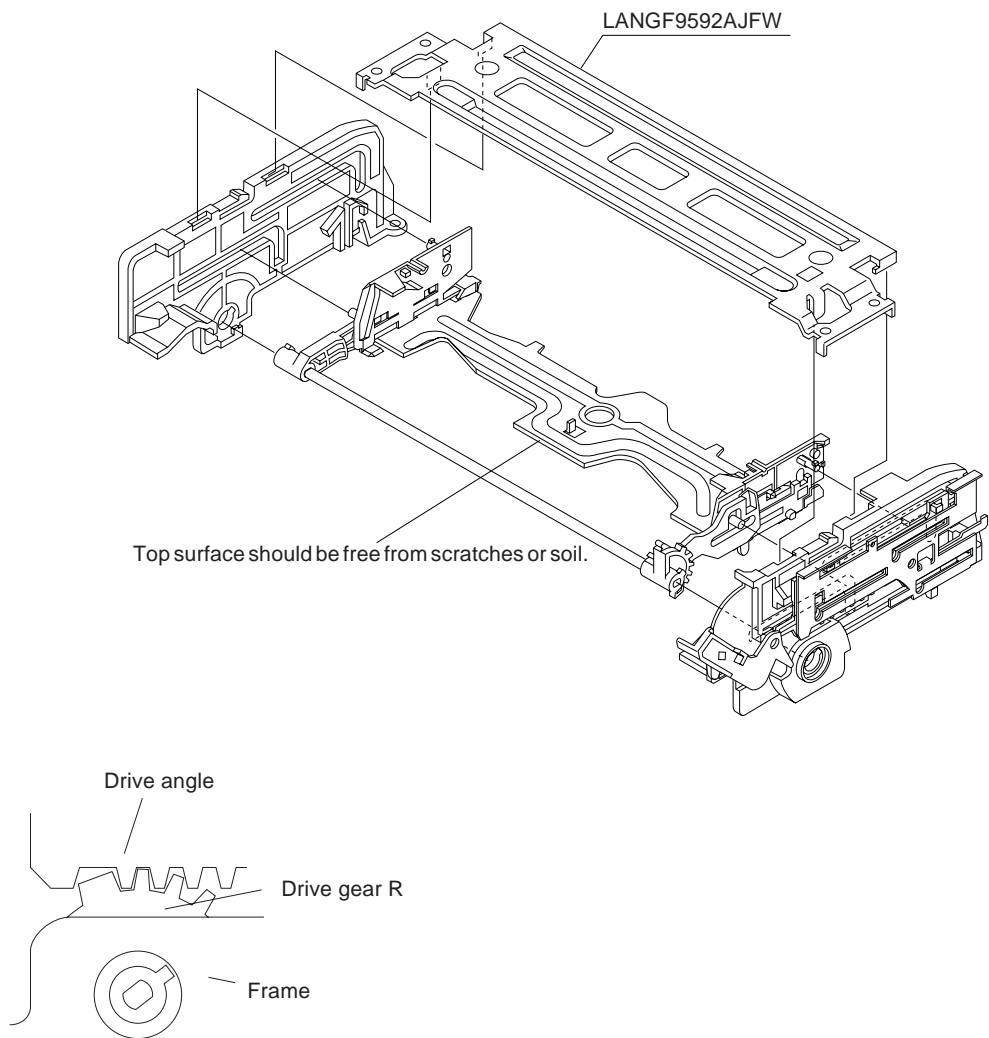


Figure 4-48.

## 5. ELECTRICAL ADJUSTMENT

### Notes:

- Before the adjustment:  
Electrical adjustments discussed here are often required after replacement of electronic components and mechanical parts such as video heads.  
Check that the mechanism and all electric components are in good working condition prior to the adjustments, otherwise adjustments can not be completed.
- The servo circuit adjustment data is written on the memory IC (IC704) that is used in this product. When this IC has been replaced, it is necessary to readjust the servo circuit data.
- Before readjusting this data, warm up and age the set for more than 5 minutes.
- Whenever possible, use an S-terminal-compatible color bar signal generator for measurement purpose. If not available, operate your color bar signal generator, modifying one step: Take the step "Feed the standard color bar signal (1.0 Vp-p) via the video input terminal" instead of the step "Feed the standard color bar signal (1.0 Vp-p) via the S input terminal."

### Instruments required:

- Color TV monitor
- AC milli-voltmeter
- Spectrum analyser
- Alignment tape (VROATSV)
- Alignment tape (VROLTHCS)
- Screwdriver for adjustment
- Dual-trace oscilloscope
- Color bar signal generator
- RF signal generator
- Alignment tape (VROABZGS)
- Blank video cassette tape

### Test point layout

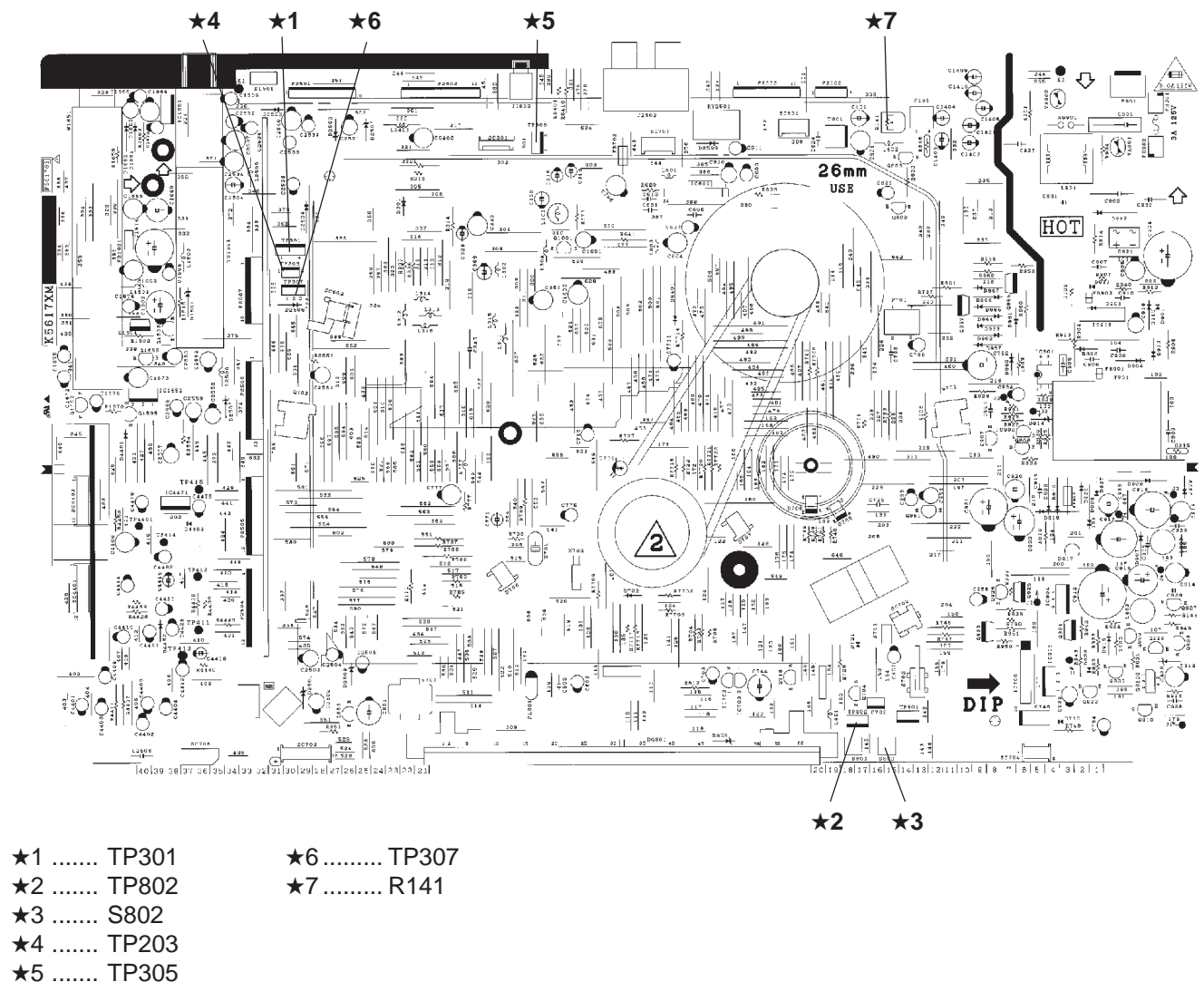


Figure 5-1

## SERVO CIRCUIT ADJUSTMENT

### 5-1 ADJUSTMENT OF HEAD SWITCHING POINT

Measuring instrument	Dual-trace oscilloscope
Mode	Playback (S-VHS)
Cassette	Alignment tape (VROABZGS)
Test point	Pin (2) of TP301 (H.SW.P) VIDEO OUT jack
Adjusting point	Call up the test mode (get TP802 short-circuited). Use the tracking/channel select (+) and (-) buttons of the set.
Specification	$5.5^{+0.5}_{-1.0}$ H (lines)

1. Play the alignment tape (VROABZGS).
2. Connect the oscilloscope to pin (2) of TP301 (CH-1) and VIDEO OUT jack (CH-2).
3. Get TP802 on the main PWB short-circuited to call the test mode.
4. Press the PLAY button, and the play icon starts flashing in the display and the automatic adjustment function gets started.
5. Wait until the play icon in the display stays on to indicate that the adjustment is complete.
6. Watch the oscilloscope screen and make sure the setting is  $5.5^{+0.5}_{-1.0}$  H.
7. If the setting is out of this range, readjust the data using the channel select (+) and (-) buttons of the set or the remote controller.
8. Finally press the STOP button to quit the test mode.

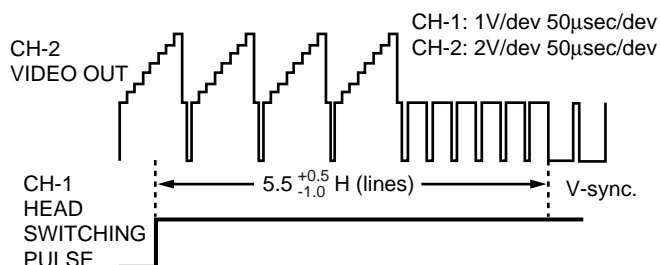


Figure 5-2.

### 5-2 ADJUSTMENT OF SLOW TRACKING PRESET

Measuring instrument	Color TV monitor
Mode	Make recording on self-recording tape in SP mode or EP mode. Play it back.
Input signal	Commercial broadcast or video signal
Test point	Color TV monitor
Adjusting point	Call up the test mode (get TP802 short-circuited). Use the TRACKING/CHANNEL select (+) and (-) buttons of the set.
Specification	Sweep the noise bar down to the bottom of the colormonitor screen.

1. Input commercial broadcast or video signal to video input terminal.
2. Make recording on self-recording tape in SP mode. Play it back.
3. Press the SLOW button and put the unit in slow mode.
4. In the slow mode, get TP802 on the main PWB short-circuited. Make sure all the display marks light up and the test mode is called up.
5. Watching the color monitor screen, press the tracking/channel select (+) and (-) buttons. Sweep the noise bar down to the bottom of the color monitor screen.
6. Press the PLAY button to bring back the play mode. Then press the PAUSE/STILL button to call up the still play mode. Now make sure there is no noise bar on the screen.
7. For the EP mode put adjustment at the same adjustment way as SP mode.

### 5-3. ADJUSTMENT OF FV (False Vertical Sync) OF STILL PICTURE

Measuring instrument	Color TV monitor
Mode	Make recording on self-recording tape in SP mode or EP mode. Play it back.
Input signal	Commercial broadcast or video signal
Test point	Color TV monitor
Adjusting point	TRACKING/CHANNEL select (+) and (-) buttons of the set.
Specification	No vertical jitter of picture

1. Input commercial broadcast or video signal to video input terminal.
2. Make recording on self-recording tape in SP mode. Play it back.



3. Press the PAUSE/STILL button to freeze the picture.
4. Look at the monitor screen and adjust (+) or (-) TRACKING/CHANNEL select buttons so that the vertical jitter of the picture is minimized.
5. For the EP mode put adjustment at the same adjustment way as SP mode.

#### 5-4 CHECKING OF OFF TRACK

Measuring instrument	Color TV monitor
Mode	Playback
Cassette	Self-recorded tape (EP mode) (See Note below)
Control	Tracking/CH control buttons(+) or (-)

1. Play a cassette which was recorded by the unit in EP mode.
2. Short circuit between TP802 on the main PWB, and press both Tracking/CH button (+) and Tracking/CH button (-) at same time.
3. Press the Tracking/CH buttons (+) and (-) 20 times each to bring the tracking off center. Make sure that:
  - 1) There is nothing unusual on the playback screen.
  - 2) There is nothing unusual in the Hi-Fi sound.
4. Cancel the short circuit.

**Note:**

Self-recorded tape is a cassette whose program was recorded by the unit being adjusted.

### Y/C CIRCUIT ADJUSTMENT (75 ohm terminated)

#### 5-5 CHECKING OF E-E LEVEL

Measuring instrument	Oscilloscope
Mode	E-E (S-VHS EP mode), DNR-OFF
Input Signal	Standard color bar signal (S input terminal), 1.0 Vp-p
Test point	S output terminal (terminated)
Adjusting point	Hold down the STOP button (S885) and SET button (S802) at once, and adjust the level using the CH UP(+)/DN(-) buttons on the set or the remote controller.
Specification	$1.00 \pm 0.04$ Vp-p

1. Feed the standard color bar signal (1.0 Vp-p) via the S input terminal to call up the S-VHS mode.
2. Hold down the STOP button (S885) on the operation PWB and the SET button (S802) on the main PWB at once for about 2 seconds to call up the test mode.
3. Press the numeric button "1" on the remote controller. (Make sure "Y:1" appears on the set's display.)

4. Press the CH UP(+) or DN(-) button on the set or the remote controller until the E-E level becomes as specified.
5. Finally take the above step 2 again to quit the test mode. (You don't have to hold them down 2 seconds or longer.)

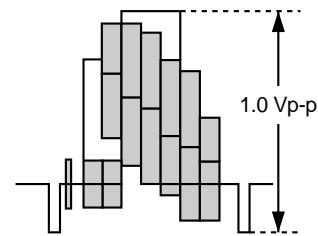


Figure 5-3.

#### 5-6 ADJUSTMENT OF VCO

Measuring instrument	Oscilloscope
Mode	E-E mode (VHS)
Input Signal	Standard color bar signal (S input terminal), 1.0 Vp-p
Test point	TP501 ~ GND
Adjusting point	FL501 (VCO Adj.)
Specification	$2.5 \pm 0.1$ Vp-p

1. Feed the standard color bar signal (1.0 Vp-p) via the S input terminal to call up the VHS E-E mode.
2. Watching the oscilloscope screen, adjust the FL501 (VCO adjustment) control until the TP501-to-GND output becomes as specified.

#### 5-7 CHECKING OF SUB EMPHASIS LEVEL

Measuring instrument	Oscilloscope
Mode	E-E (S-VHS EP mode), DNR-OFF
Input Signal	Standard color bar signal (S input terminal), 1.0 Vp-p
Test point	TP403 ~ GND
Adjusting point	Hold down the STOP button (S885) and SET button (S802) at once, and adjust the level using the CH (+)/(-) buttons on the set or the remote controller.
Specification	$400 \pm 10$ mVp-p

1. Feed the standard color bar signal (1.0 Vp-p) via the S input terminal to call up the S-VHS mode.
2. Hold down the STOP button (S885) on the operation PWB and the SET button (S802) on the main PWB at once for about 2 seconds to call up the test mode.

- Press the numeric button "2" on the remote controller. (Make sure "Y:2" appears on the set's display.)
- Press the CH UP(+) or DN(-) button on the set or the remote controller until the sub-emphasis level becomes as specified.
- Finally take the above step 2 again to quit the test mode. (You don't have to hold them down 2 seconds or longer.)

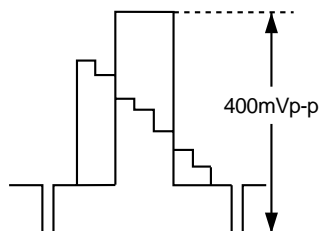


Figure 5-4.

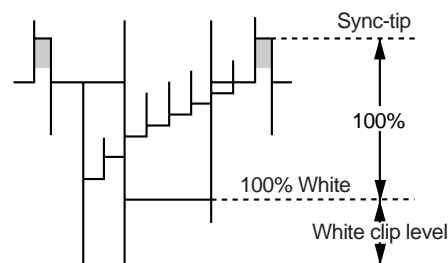


Figure 5-5.

### 5-8 S-VHS / S-VHS ET / VHS WHITE CLIP LEVEL ADJUSTMENT

Measuring instrument	Oscilloscope
Mode	REC (S-VHS/VHS/S-VHS ET SP/EP mode), DNR-OFF
Input Signal	Standard color bar signal (S input terminal), 1.0 Vp-p
Test point	TP402 ~ GND
Adjusting point	Hold down the STOP button (S885) and SET button (S802) at once, and adjust the level using the CH (+)/(-) buttons on the set or the remote controller.
Specification	110 ± 5% (S-VHS) 90 ± 5% (S-VHS ET/VHS)

- Feed the standard color bar signal (1.0 Vp-p) via the S input terminal to call up the S-VHS mode.
- Hold down the STOP button (S885) on the operation PWB and the SET button (S802) on the main PWB at once for about 2 seconds to call up the test mode.
- Press the numeric button "3" on the remote controller. (Make sure "Y:3" appears on the set's display.)
- Press the CH UP(+) or DN(-) button on the set or the remote controller until the white clip level becomes as specified.
- Finally take the above step 2 again to quit the test mode. (You don't have to hold them down 2 seconds or longer.)
- For the S-VHS ET and VHS modes too, take the same adjustment procedure as for the S-VHS mode. For the S-VHS ET mode, insert a VHS cassette and turn on the S-VHS ET button on the remote controller. For the VHS mode, insert a VHS cassette and turn off the S-VHS ET button on the remote controller.

### 5-9 S-VHS / S-VHS ET / VHS FM CARRIER/ DEVIATION ADJUSTMENT

Measuring instrument	Spectrum analyser
Mode	REC (S-VHS/VHS/S-VHS ET SP/EP mode), DNR-OFF
Input Signal	Standard color bar signal (S input terminal), 1.0 Vp-p
Test point	TP203 ~ GND
Adjusting point	Hold down the STOP button (S885) and SET button (S802) at once, and adjust the level using the CH (+)/(-) buttons on the set or the remote controller.
Specification	S-VHS/S-VHS ET: 5.4 ± 0.05 MHz (FM Carrier) 7.0 ± 0.05 MHz (Deviation) VHS: 3.4 ± 0.05 MHz (FM Carrier) 4.4 ± 0.05 MHz (Deviation)

- Feed the standard color bar signal (1.0 Vp-p) via the S input terminal to call up the S-VHS mode.
- Hold down the STOP button (S885) on the operation PWB and the SET button (S802) on the main PWB at once for about 2 seconds to call up the test mode.
- Press the numeric button "4" on the remote controller. (Make sure "Y:4" appears on the set's display.)
- Press the CH UP(+) or DN(-) button on the set or the remote controller until the FM carrier frequency becomes as specified.
- Finally take the above step 2 again to quit the test mode. (You don't have to hold them down 2 seconds or longer.)
- Next take the above step 2 again to adjust the FM deviation. Press the numeric button "5" on the remote controller. (Make sure "Y:5" appears on the set's display.)
- Press the CH UP(+) or DN(-) button on the set or the remote controller until the FM deviation becomes as specified.
- Finally take the above step 2 again to quit the test mode. (You don't have to hold them down 2 seconds or longer.)
- For the S-VHS ET and VHS modes too, take the same

adjustment procedure as for the S-VHS mode. For the S-VHS ET mode, insert a VHS cassette and turn on the S-VHS ET button on the remote controller. For the VHS mode, insert a VHS cassette and turn off the S-VHS ET button on the remote controller.

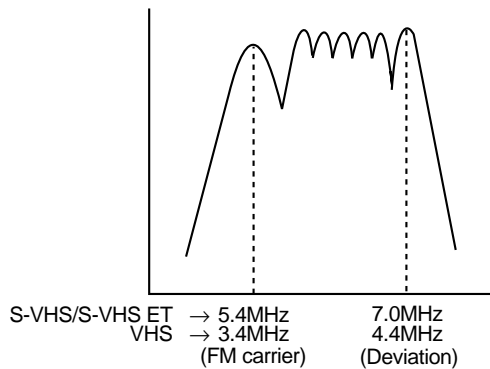


Figure 5-6.

### 5-10 S-VHS / S-VHS ET / VHS REC CHROMA CURRENT ADJUSTMENT

Measuring instrument	Oscilloscope
Mode	REC (S-VHS/VHS/S-VHS ET SP/EP mode), DNR-OFF
Input Signal	Standard color bar signal (S input terminal), 1.0 Vp-p
Test point	EP mode: Pins (1)(+) and (2)(-) of TP305 SP mode: Pin (1) of TP307 ~ GND
Adjusting point	Hold down the STOP button (S885) and SET button (S802) at once, and adjust the level using the CH (+)/(-) buttons on the set or the remote controller.
Specification	S-VHS: EP mode: $24 \pm 2$ mVp-p (Red level) SP mode: $28 \pm 2$ mVp-p (Red level)
	S-VHS ET: EP mode: $20 \pm 2$ mVp-p (Red level) SP mode: $26 \pm 2$ mVp-p (Red level)
	VHS: EP mode: $26 \pm 2$ mVp-p (Red level) SP mode: $28 \pm 2$ mVp-p (Red level)

1. Feed the standard color bar signal (1.0 Vp-p) via the S input terminal to call up the S-VHS EP mode.
2. Hold down the STOP button (S885) on the operation PWB and the SET button (S802) on the main PWB at once for about 2 seconds to call up the test mode.
3. Press the numeric button "7" on the remote controller. (Make sure "Y:7" appears on the set's display.)
4. Connect a 47 $\mu$ F/16V or higher capacitor between pins (1) and (2) of TP305. Make the FM component short-circuited.

5. Press the CH UP(+) or DN(-) button on the set or the remote controller until the RED level of chroma signal becomes as specified.
6. Next call up the SP mode and make sure the output at pin (1) of TP307 is 1.2 dB greater than that in the EP mode. Readjust if out of spec.
7. Next call up the S-VHF ET EP mode.
8. Press the CH UP(+) or DN(-) button on the set or the remote controller until the sync tip level becomes as specified.
9. Call up the SP mode and make sure the output at pin (1) of TP307 is 2.1 dB greater than that in the EP mode.
10. Next call up the VHF EP mode.
11. Press the CH UP(+) or DN(-) button on the set or the remote controller until the sync tip level becomes as specified.
12. Call up the SP mode and make sure the output at pin (1) of TP307 is 0.6 dB greater than that in the EP mode.
13. Finally disconnect the capacitor that was connected in the above step 4.

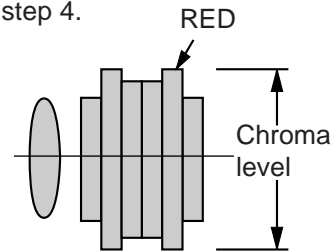


Figure 5-7.

### 5-11 S-VHS/S-VHSET/VHS REC FMCURRENT ADJUSTMENT

Measuring instrument	Oscilloscope
Mode	REC (S-VHS/VHS/S-VHS ET SP/EP mode), DNR-OFF
Input Signal	Standard color bar signal (S input terminal), 1.0 Vp-p
Test point	EP mode: Pins (1)(+) and (2)(-) of TP305 SP mode: Pin (3) of TP307 ~ GND
Adjusting point	Hold down the STOP button (S885) and SET button (S802) at once, and adjust the level using the CH (+)/(-) buttons on the set or the remote controller.
Specification	S-VHS: EP mode: $84 \pm 4$ mVp-p (sync tip) SP mode: $100 \pm 4$ mVp-p (sync tip)
	S-VHS ET: EP mode: $70 \pm 4$ mVp-p (sync tip) SP mode: $90 \pm 4$ mVp-p (sync tip)
	VHS: EP mode: $92 \pm 4$ mVp-p (sync tip) SP mode: $104 \pm 4$ mVp-p (sync tip)

1. Feed the standard color bar signal (1.0 Vp-p) via the S input terminal to call up the S-VHS EP mode.
2. Hold down the STOP button (S885) on the operation PWB and the SET button (S802) on the main PWB at once for about 2 seconds to call up the test mode.
3. Press the numeric button "8" on the remote controller. (Make sure "Y:8" appears on the set's display.)
4. Press the CH UP(+) or DN(-) button on the set or the remote controller until the sync tip level becomes as specified.
5. Next call up the SP mode and make sure the output at pin (3) of TP307 is 1.5 dB greater than that in the EP mode. Readjust if out of spec.
6. Next call up the S-VHF ET EP mode.
7. Press the CH UP(+) or DN(-) button on the set or the remote controller until the sync tip level becomes as specified.
8. Call up the SP mode and make sure the output at pin (3) of TP307 is 2.2 dB greater than that in the EP mode.
9. Next call up the VHF EP mode.
10. Press the CH UP(+) or DN(-) button on the set or the remote controller until the sync tip level becomes as specified.
11. Call up the SP mode and make sure the output at pin (3) of TP307 is 1.1 dB greater than that in the EP mode.

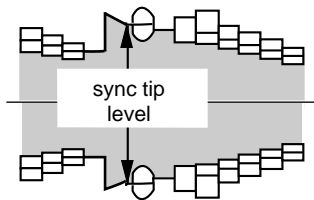


Figure 5-7.

## 5-12 S-VHS/S-VHSET/VHSPPLAYBACKLEVEL ADJUSTMENT

Measuring instrument	Oscilloscope
Mode	PLAYBACK (S-VHS/VHS), DNR-OFF
Cassette	Alignment tape (VROLTHCS) (S-VHS NTSC color bar) Alignment tape (VROATSV) (VHS NTSC color bar)
Test point	S output terminal (Terminated)
Adjusting point	Hold down the STOP button (S885) and SET button (S802) at once, and adjust the level using the CH (+)/(-) buttons on the set or the remote controller.
Specification	1.00 ± 0.04 Vp-p

1. Playback the alignment tape. (VROLTHCS for S-VHS, VROATSV FOR VHS)
2. Hold down the STOP button (S885) on the operation PWB and the SET button (S802) on the main PWB at once for about 2 seconds to call up the test mode.

3. Press the numeric button "6" on the remote controller. (Make sure "Y:6" appears on the set's display.)
4. Press the CH UP(+) or DN(-) button on the set or the remote controller until the playback level becomes as specified.
5. Finally take the above step 2 again to quit the test mode.
6. For the S-VHS ET and VHS modes too, take the same adjustment procedure as for the S-VHS mode.

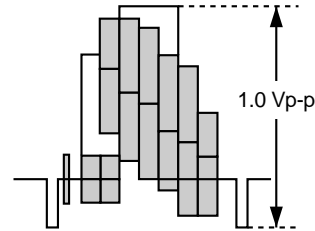


Figure 5-8.

## MTS CIRCUIT ADJUSTMENT

### 5-13 ADJUSTMENT OF SIF-INPUT LEVEL

Measuring instrument	AC milli-voltmeter and RF signal generator.
Mode	E-E
Input signal	RF CH-10 (at 1kHz 100%MOD.)
Test point	AUDIO OUT jack
Control	R141(S-IF ADJ.)
Specification	-3 ± 1dBs (1.2~2.0Vp-p)

1. Feed the RF signal CH-10 (at 1kHz 100%MOD.) to antenna terminal.
2. Connect the AC milli-voltmeter to AUDIO OUT jack.
3. Adjust R141(S-IF ADJ.) so that the AC milli-voltmeter reads -3 ± 1dBs.

### 5-14 ADJUSTMENT OF FILTER

Measuring instrument	AC milli-voltmeter
Mode	E-E
Input signal	22.9kHz at 245mVrms
Test point	TP164 (Sig.), TP165 (GND)
Control	R163 (FILTER ADJ.)
Specification	Minimized

1. Make the short circuited to TP162 (Sig.)~TP163 (GND).
2. Connect the AC milli-voltmeter to TP164 (Sig.)~TP165 (GND).

3. Feed the 22.9kHz at 245mVrms signal to the TP161(Sig.)~TP163 (GND).
4. Adjust R163 (FILTER ADJ.) so that the AC milli-voltmeter reads minimized.

### 5-15 ADJUSTMENT OF STEREO VCO

Measuring instrument	AC milli-voltmeter
Mode	E-E
Input signal	15.734kHz at 50mVrms
Test point	TP168 (Sig.),TP169 (GND)
Control	R162 (STEREO VCO ADJ.)
Specification	_____

1. Make the short circuited to TP162 (Sig.)~TP163 (GND).
2. Connect the AC milli-voltmeter to TP168(Sig.)~TP169 (GND).
3. Make a note of the level of TP168 (Sig.)~TP169 (GND).
4. Feed the 15.734kHz at 50mVrms signal to the TP161(Sig.)~TP163 (GND).
5. Adjust R162 (STEREO VCO ADJ.) so that the levels for non signal inputted STEP 3. and inputted be just the same.
6. When the 15.734kHz at 50mVrms signal is fed confirm the display "STEREO" is indicated on OSD.

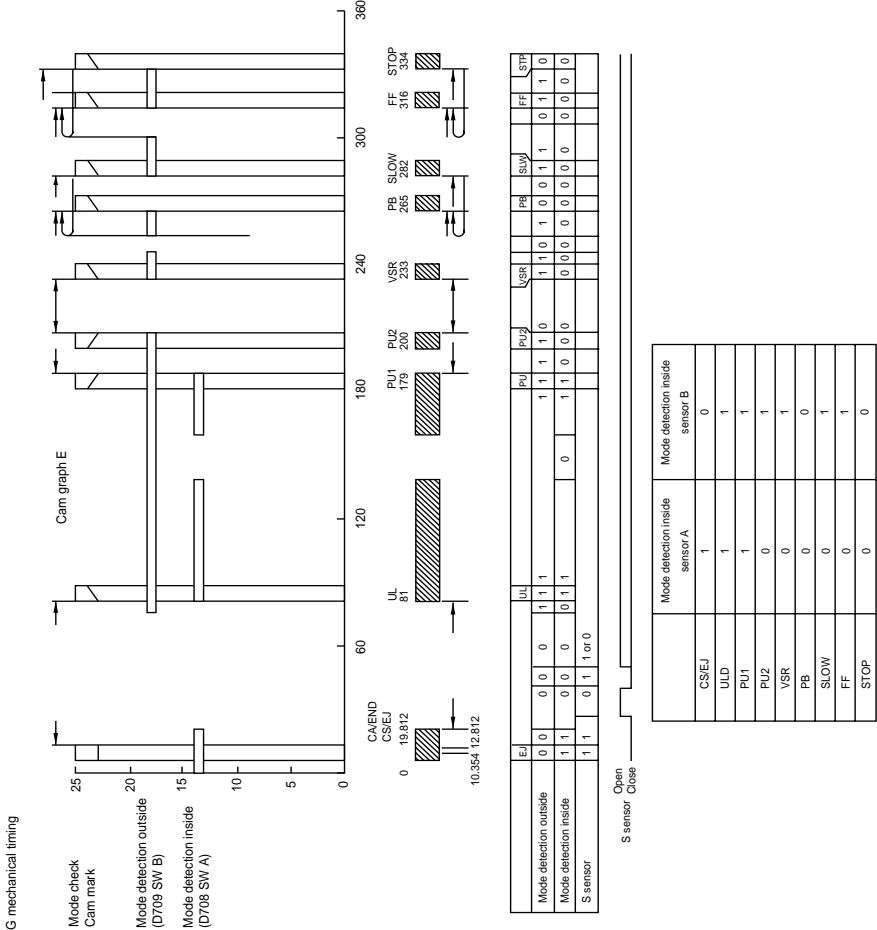
### 5-16 ADJUSTMENT OF STEREO SEPARATION

Measuring instrument	Dual AC milli-voltmeter and RF signal generator.
Mode	E-E
Input signal	RF CH-10 (300Hz and 3kHz 30% modulation)
Test point	AUDIO OUT jack
Control	R164 (SEPARATION-1 ADJ.) R165 (SEPARATION-2 ADJ.)
Specification	maximized

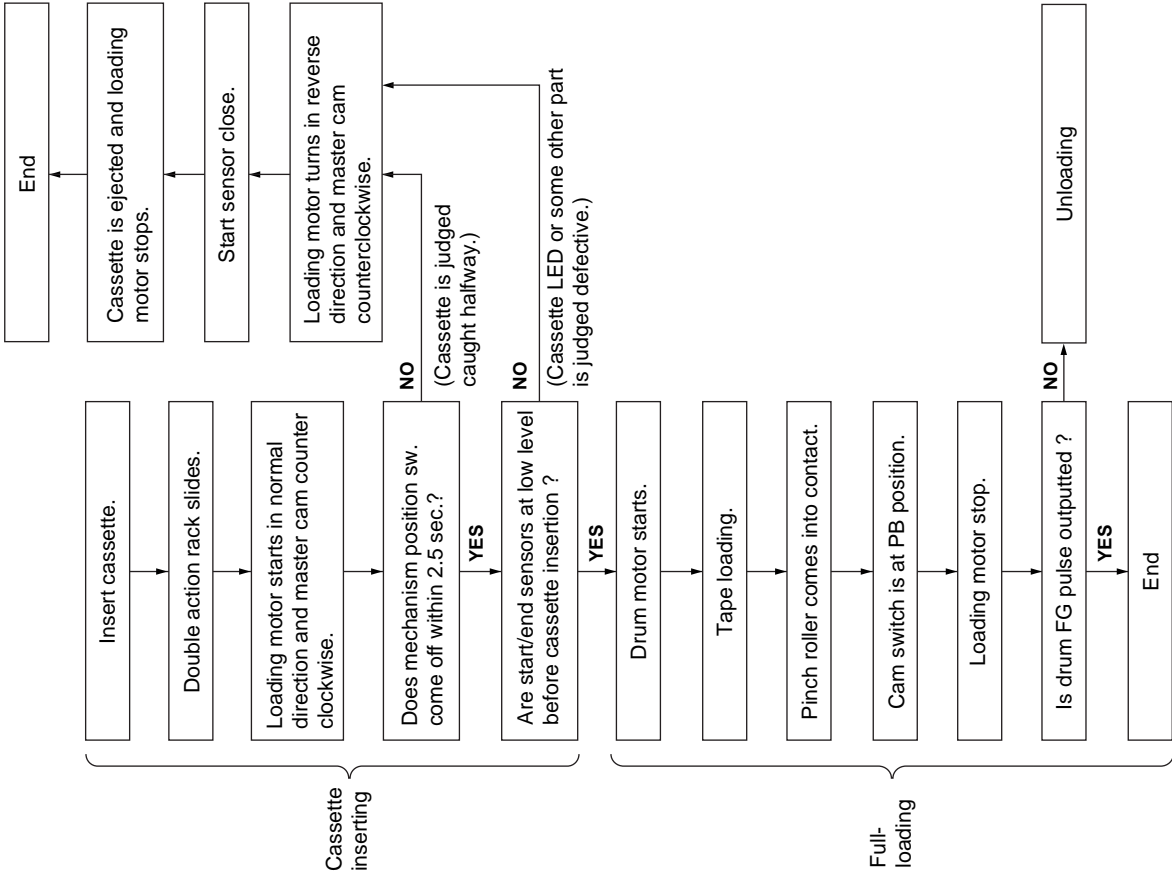
1. Feed the RF signal CH-10 (300Hz and 3kHz 30% modulation) to antenna terminal.
2. Connect an Dual AC milli-voltmeter to left channel and right channel output terminales.
3. Set the audio signal to 300Hz and the modulation factor to 30% (Left channel only) and adjust R164 (SEPARATION-1 ADJ.) so that the difference between left channel and right channel outputs becomes maximized.
4. Set the audio signal to 3kHz and the modulation factor to 30% (right channel only) and adjust R165 (SEPARATION-2 ADJ.) so that the difference between left channel and right channel outputs becomes maximized.
5. Repeat STEP 3. until obtain a specification.

6. MECHANISM OPERATION FLOWCHART AND TROUBLESHOOTING GUIDE

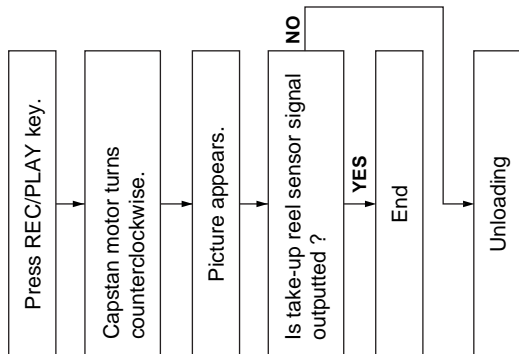
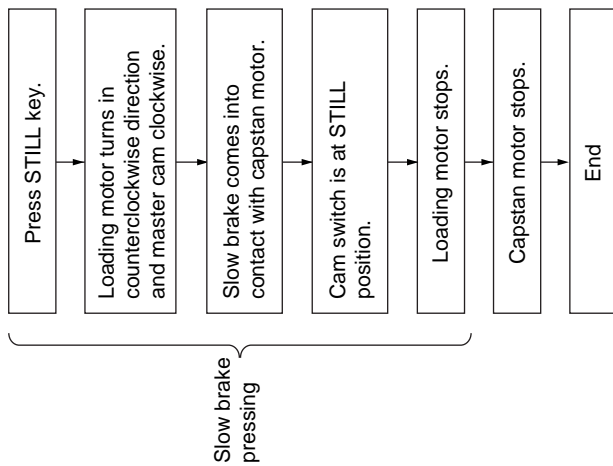
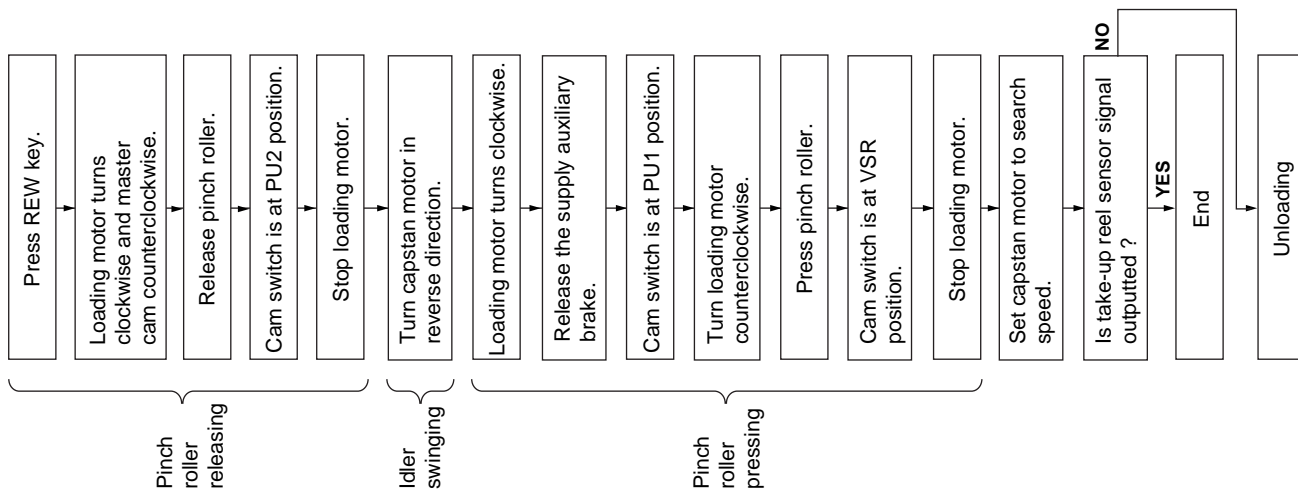
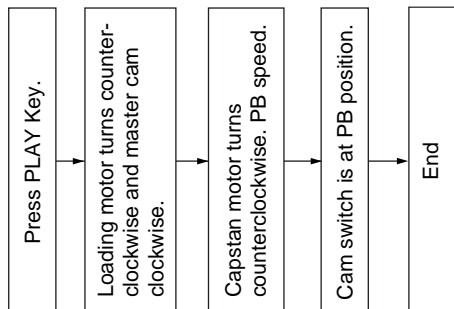
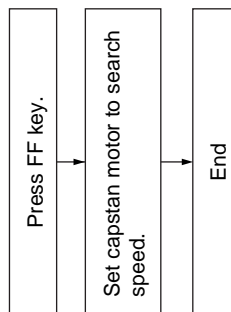
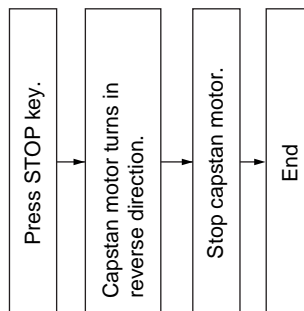
MECHANISM OPERATION FLOWCHART



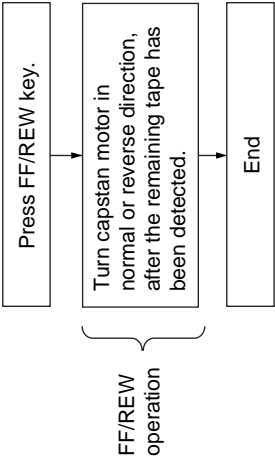
CASSETTE INSERTION → STOP



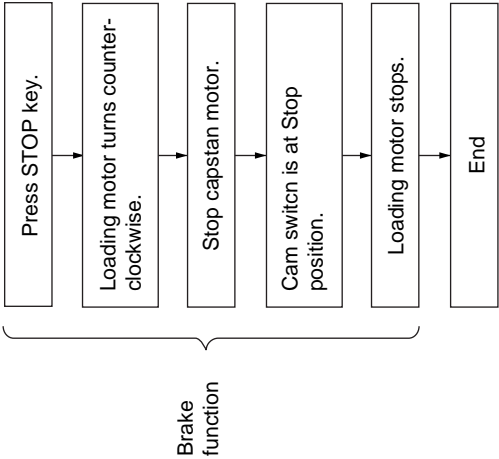


STOP → REC/PLAYPLAY → STILLPLAY → VSRVSR → PLAYPLAY → VSFREC/PLAY → STOP

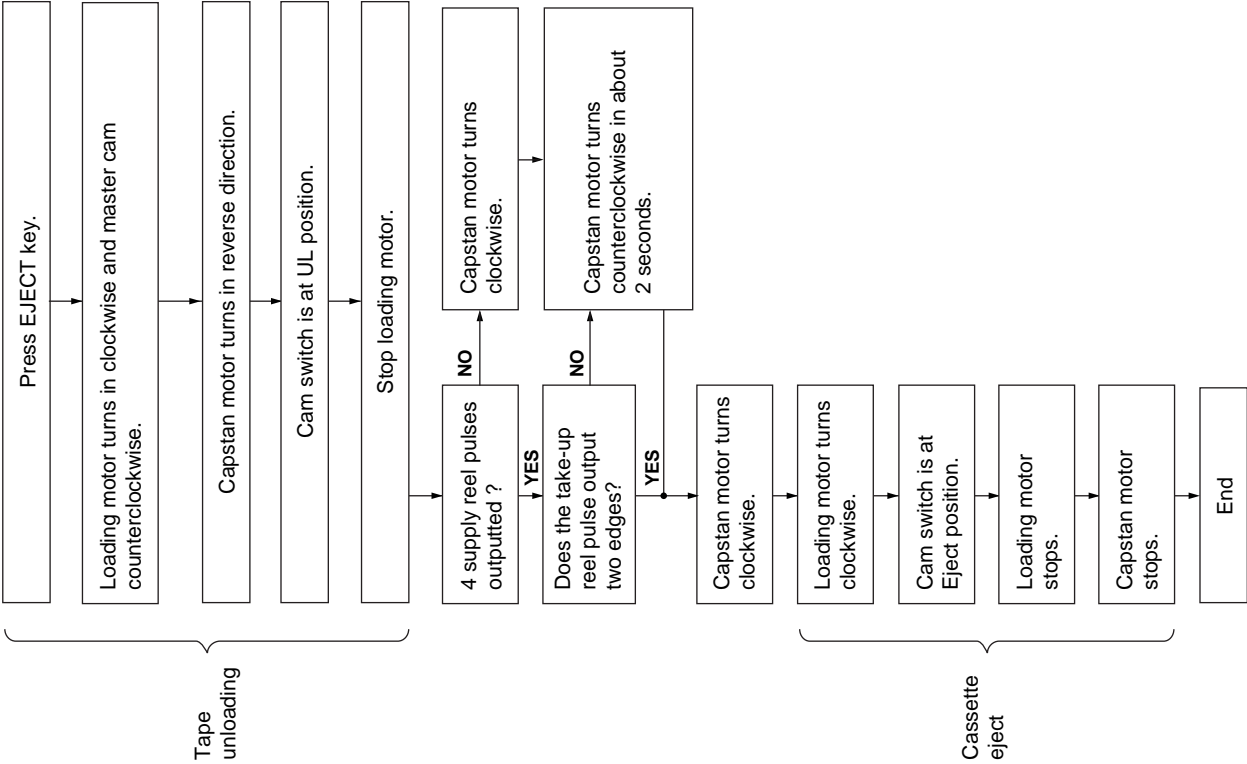
STOP → FF/REW



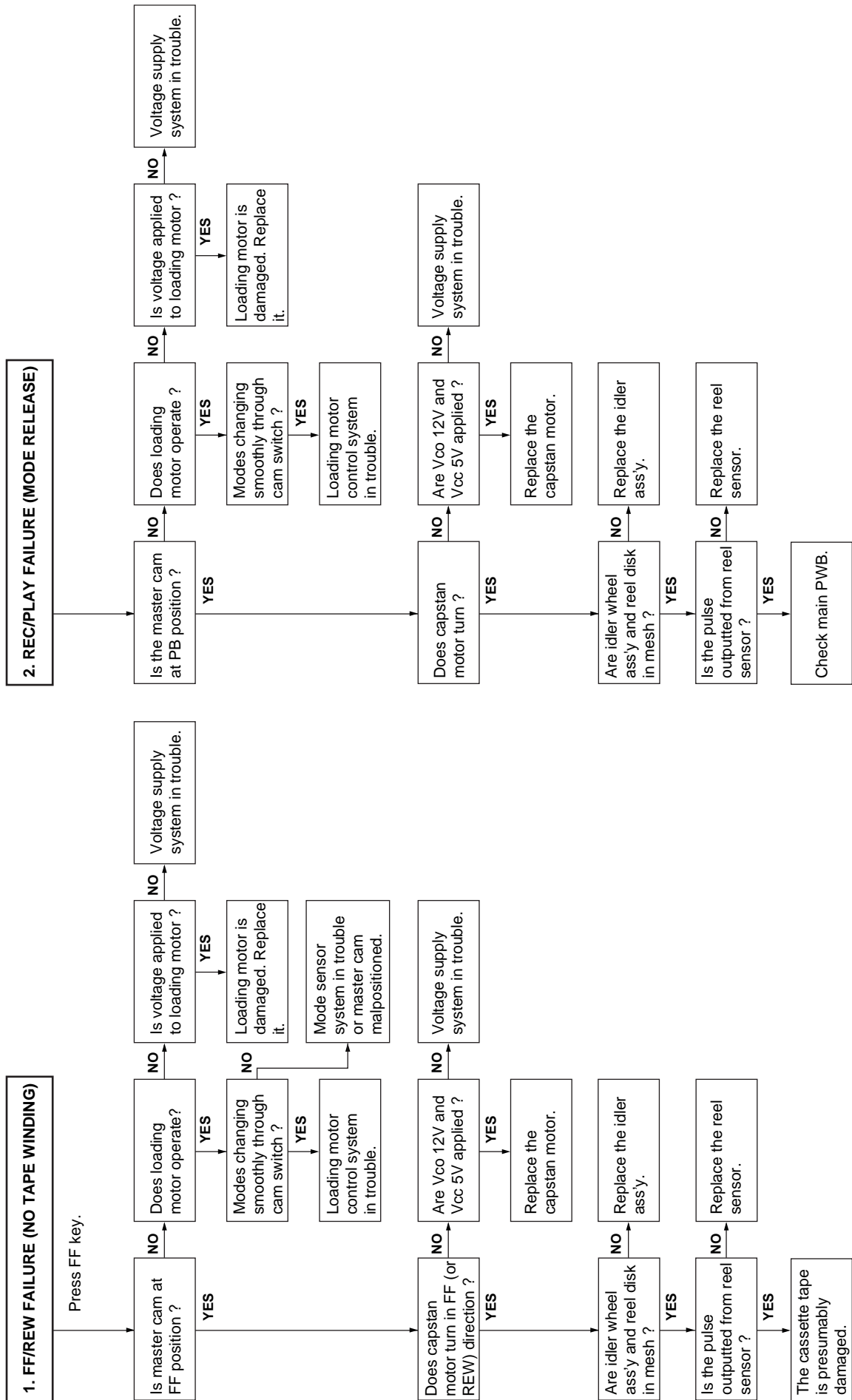
FF/REW → STOP



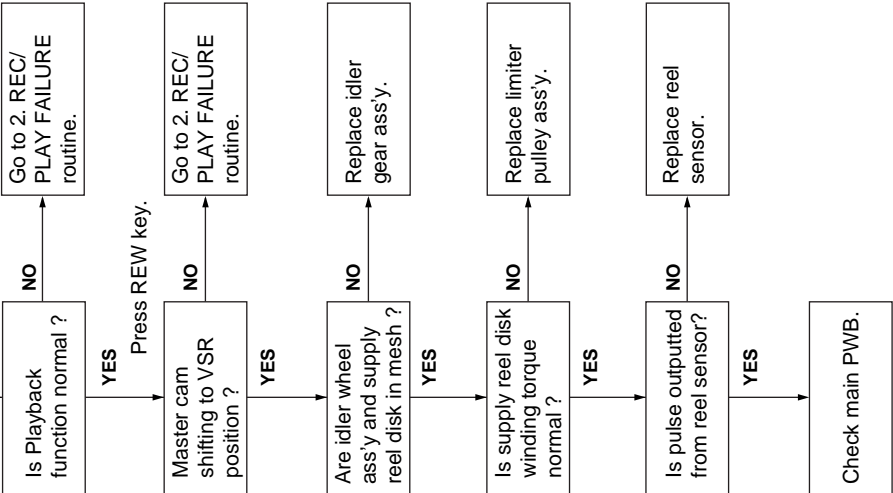
STOP → CASSETTE EJECT



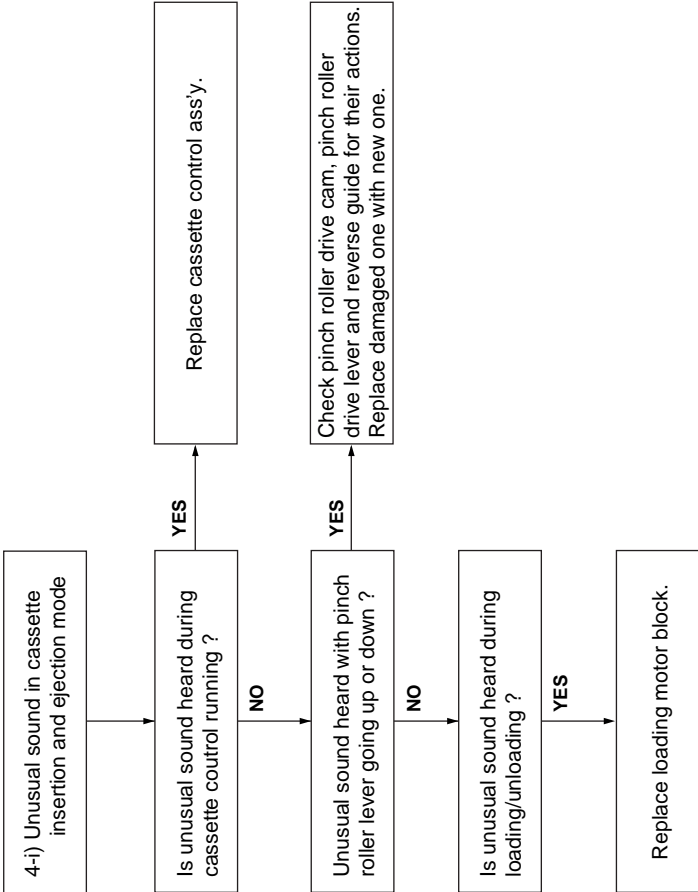
## MECHANISM TROUBLESHOOTING

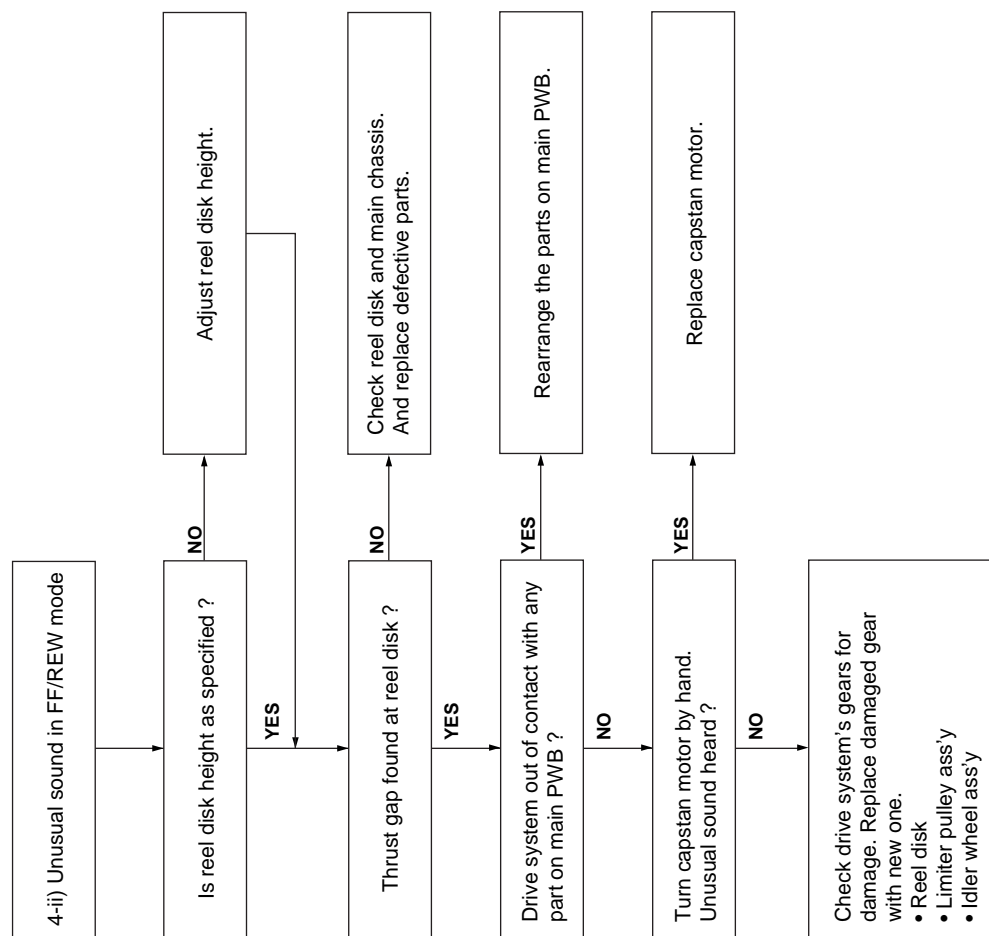


3. WINDING FAILURE AT VSR



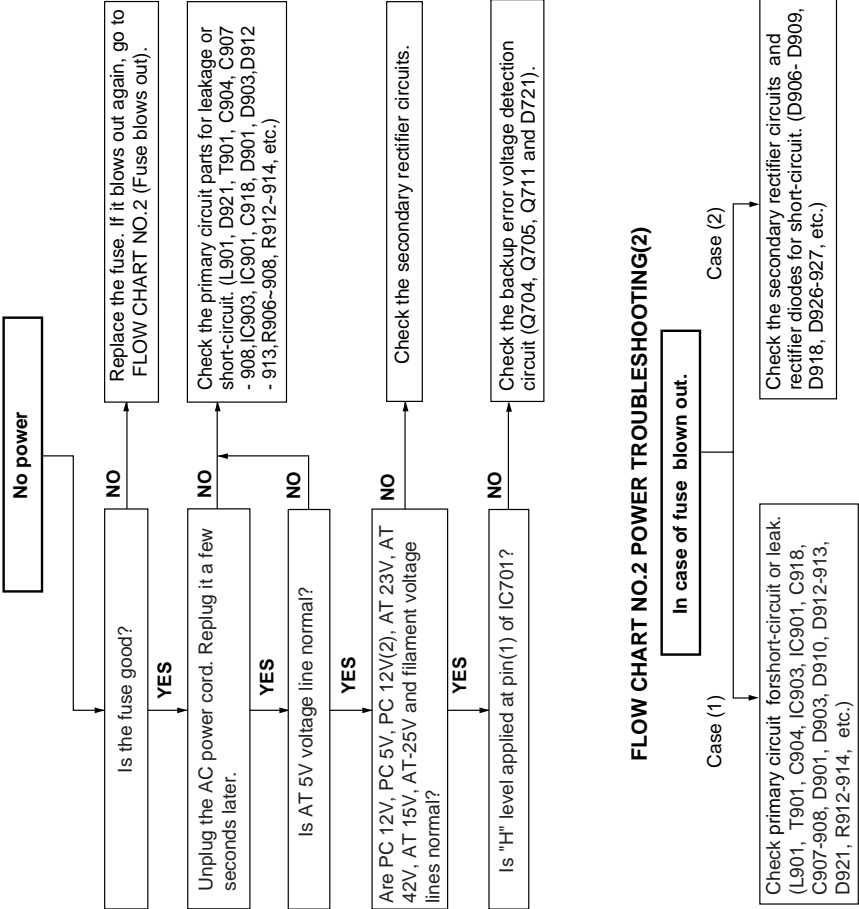
4. UNUSUAL SOUND IN EACH MODE



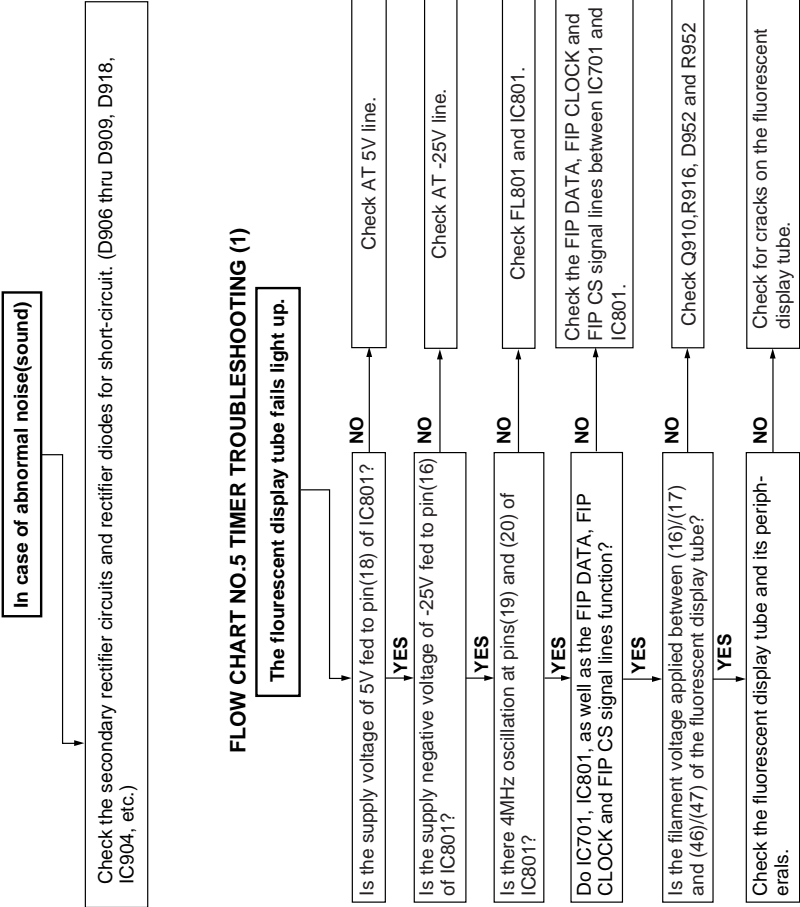


7. TROUBLESHOOTING

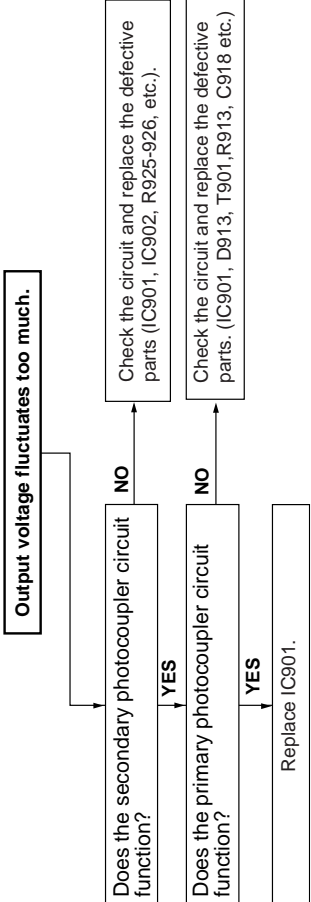
FLOW CHART NO.1 POWER TROUBLESHOOTING(1)



FLOW CHART NO.4 POWER TROUBLESHOOTING(3)

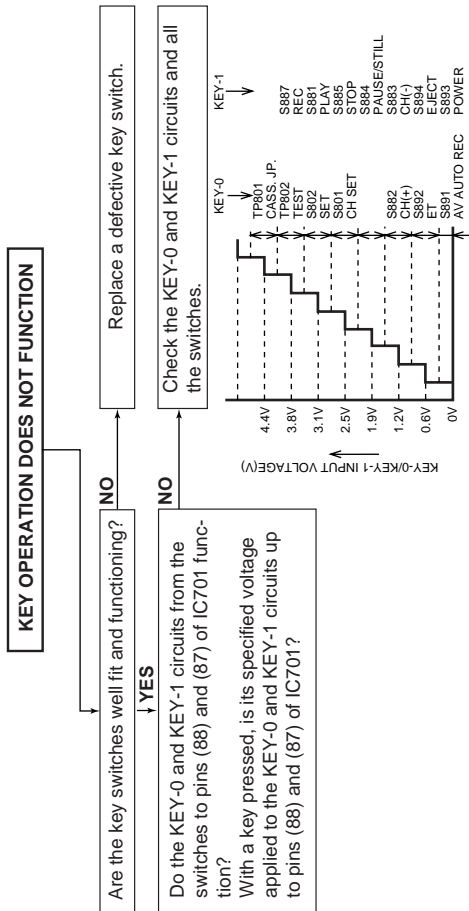


FLOW CHART NO.3 POWER TROUBLESHOOTING(4)

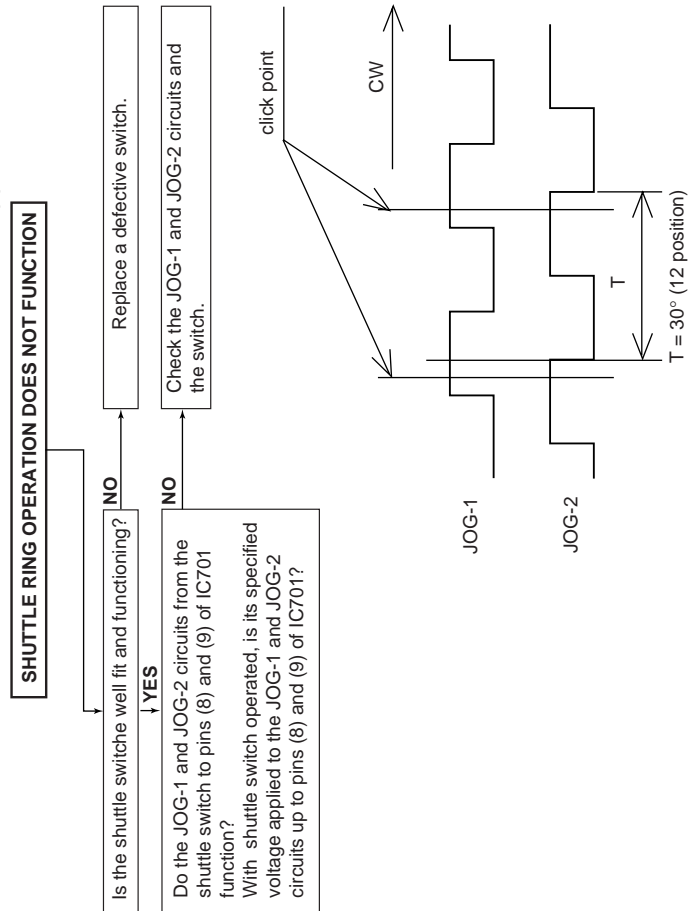




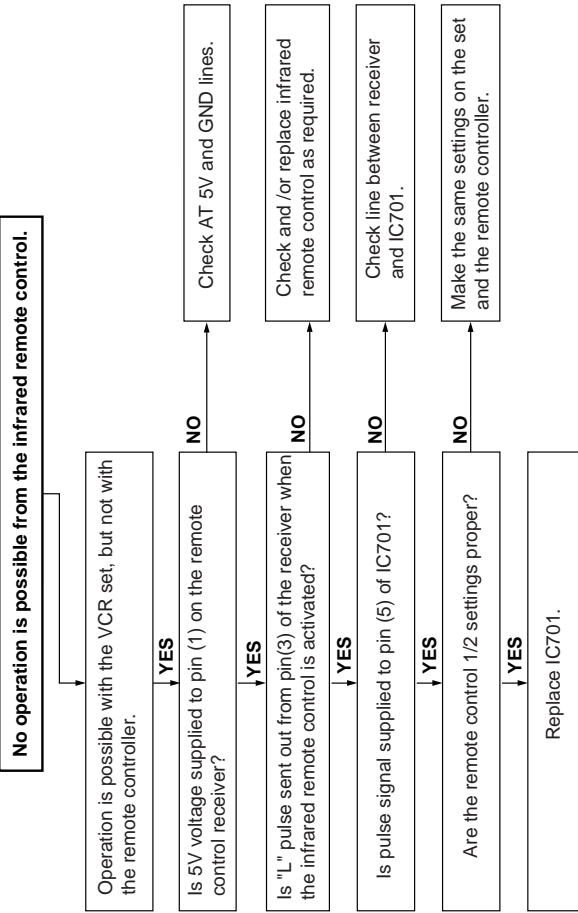
FLOW CHART NO.6 TIMER TROUBLESHOOTING (2)



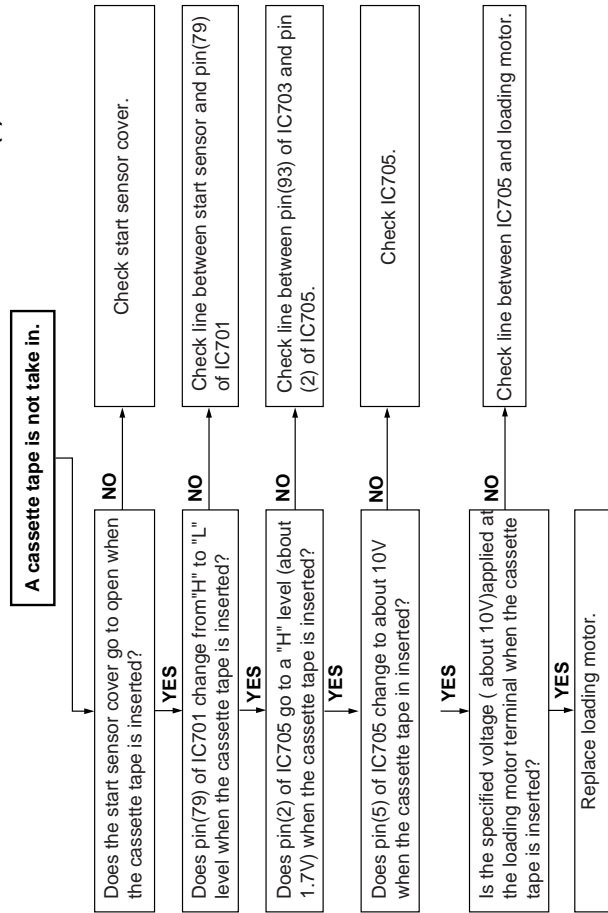
FLOW CHART NO.7 TIMER TROUBLESHOOTING (3)



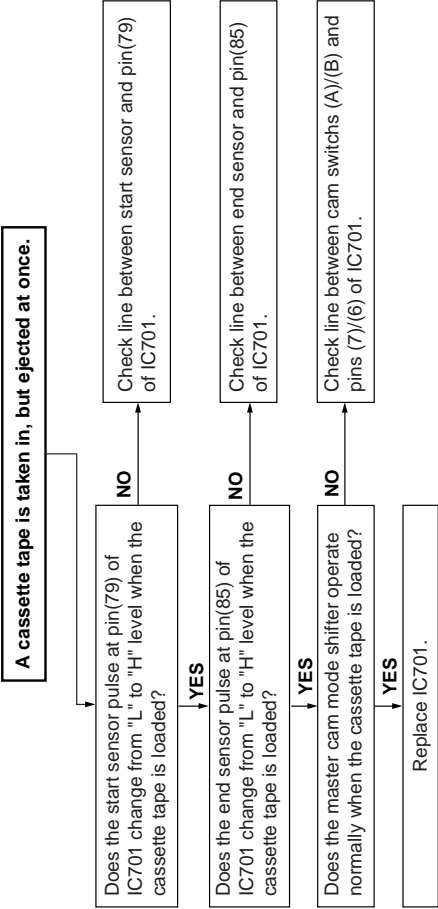
FLOW CHART NO.8 INFRARED R/C TROUBLESHOOTING



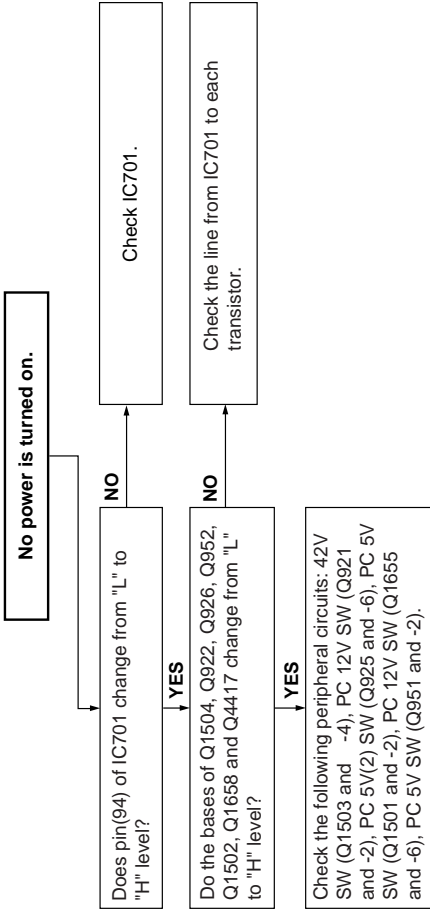
FLOW CHART NO.9 CASSETTE CONTROL TROUBLESHOOTING(1)



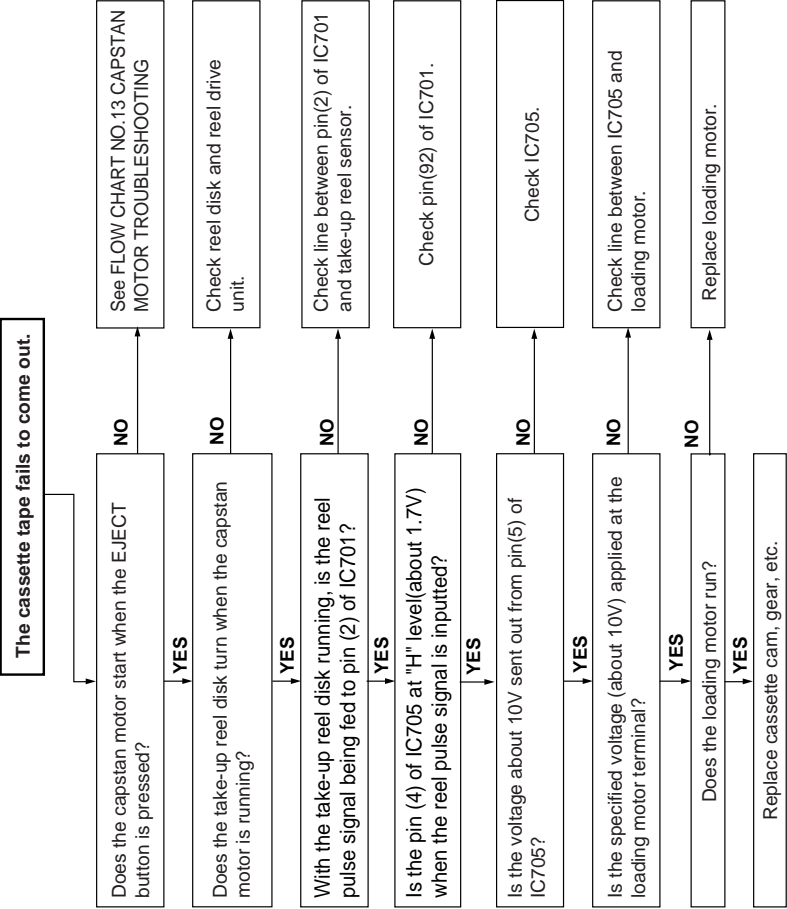
FLOW CHART NO.10 CASSETTE CONTROL TROUBLESHOOTING(2)



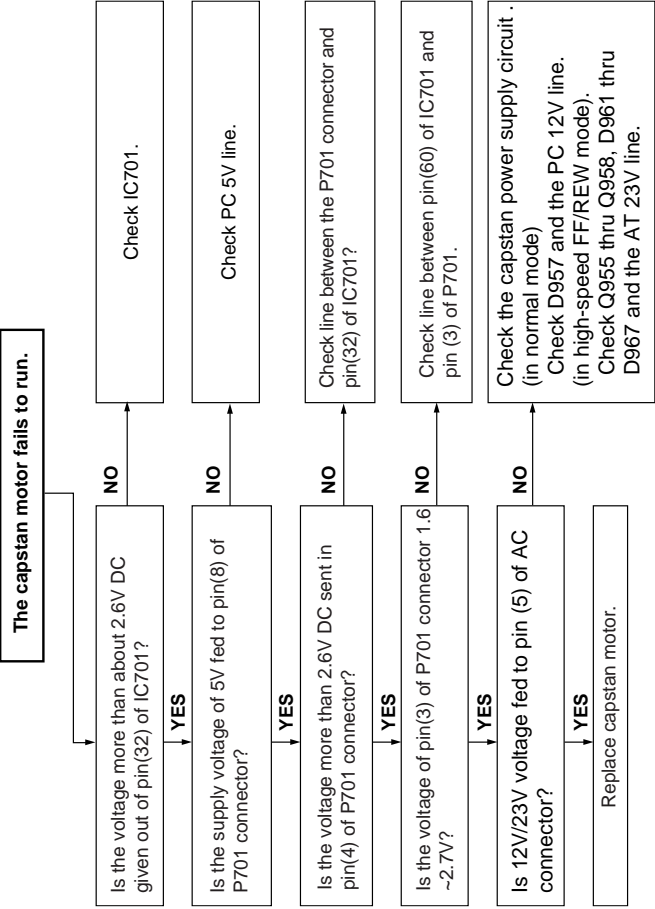
FLOW CHART NO.12 SYSTEM CONTROL TROUBLESHOOTING



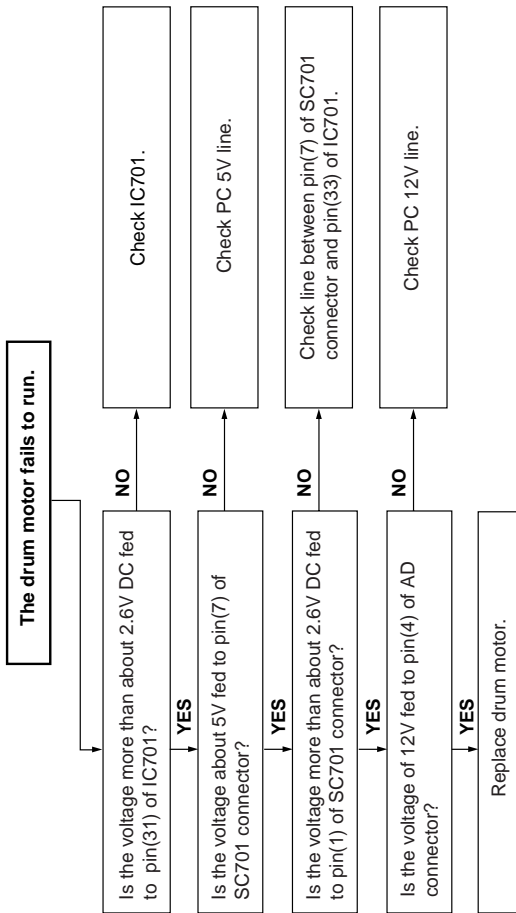
FLOW CHART NO.11 LOADING MOTOR AND EJECT TROUBLESHOOTING



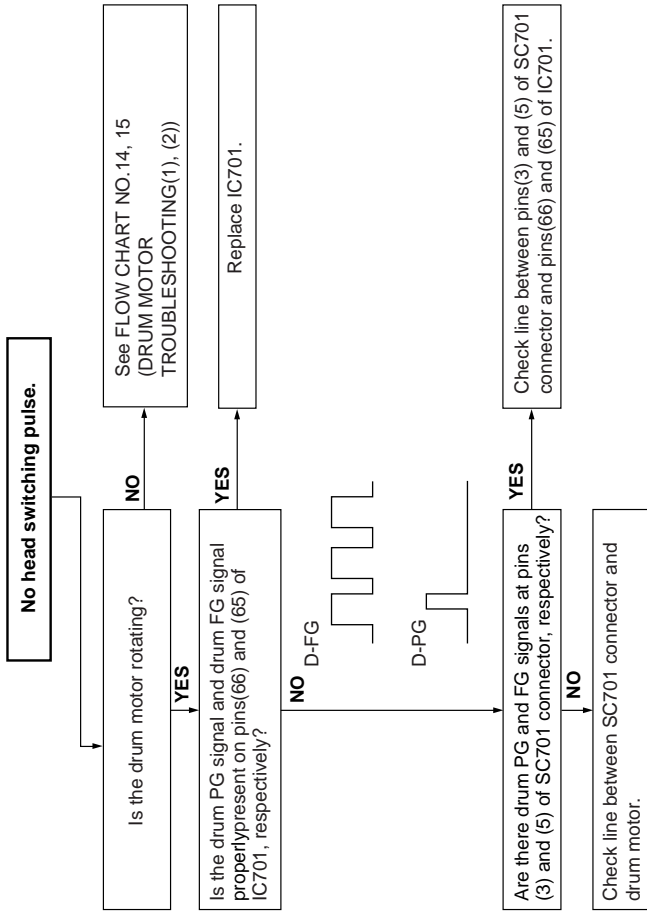
FLOW CHART NO.13 CAPSTAN MOTOR TROUBLESHOOTING



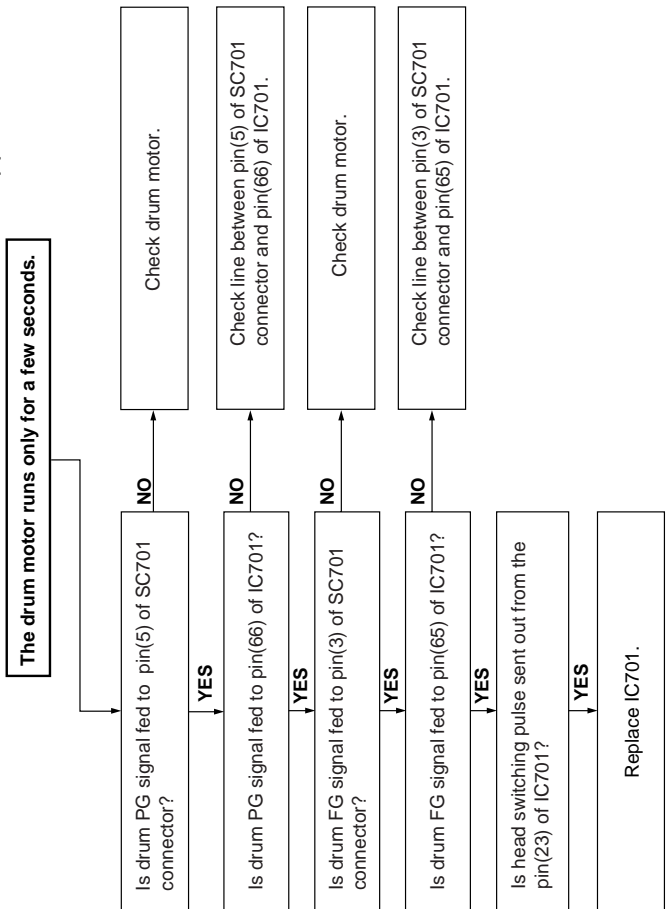
FLOW CHART NO.14 DRUM MOTOR TROUBLESHOOTING(1)



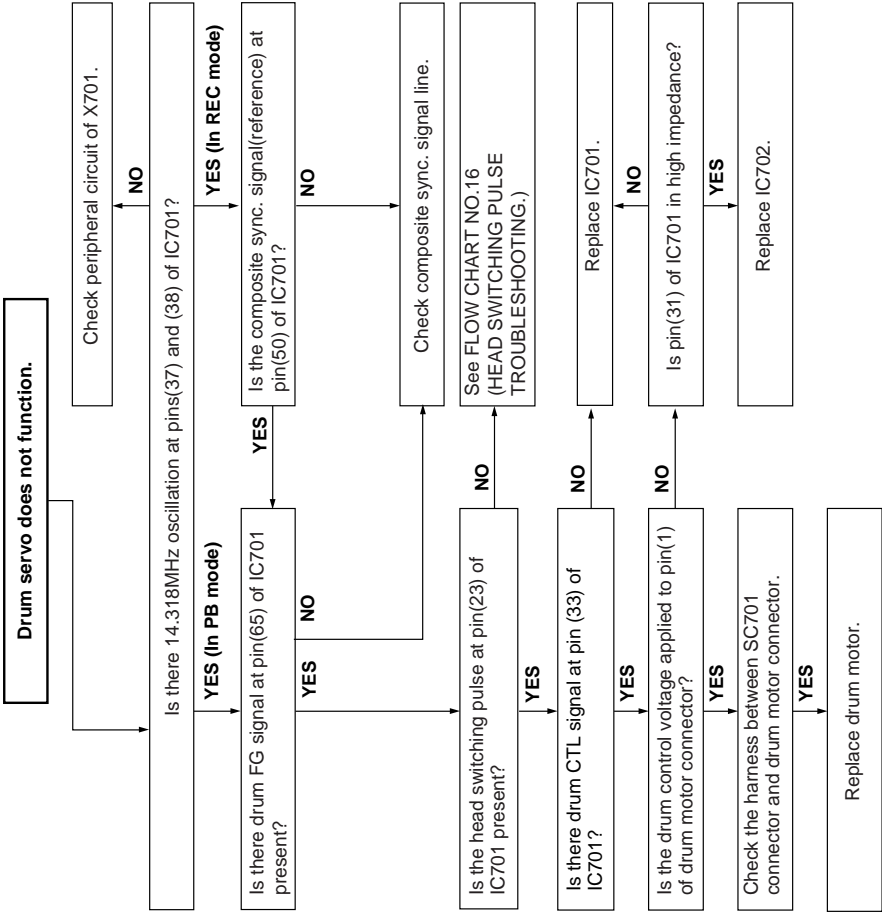
FLOW CHART NO.16 HEAD SWITCHING PULSE TROUBLESHOOTING.



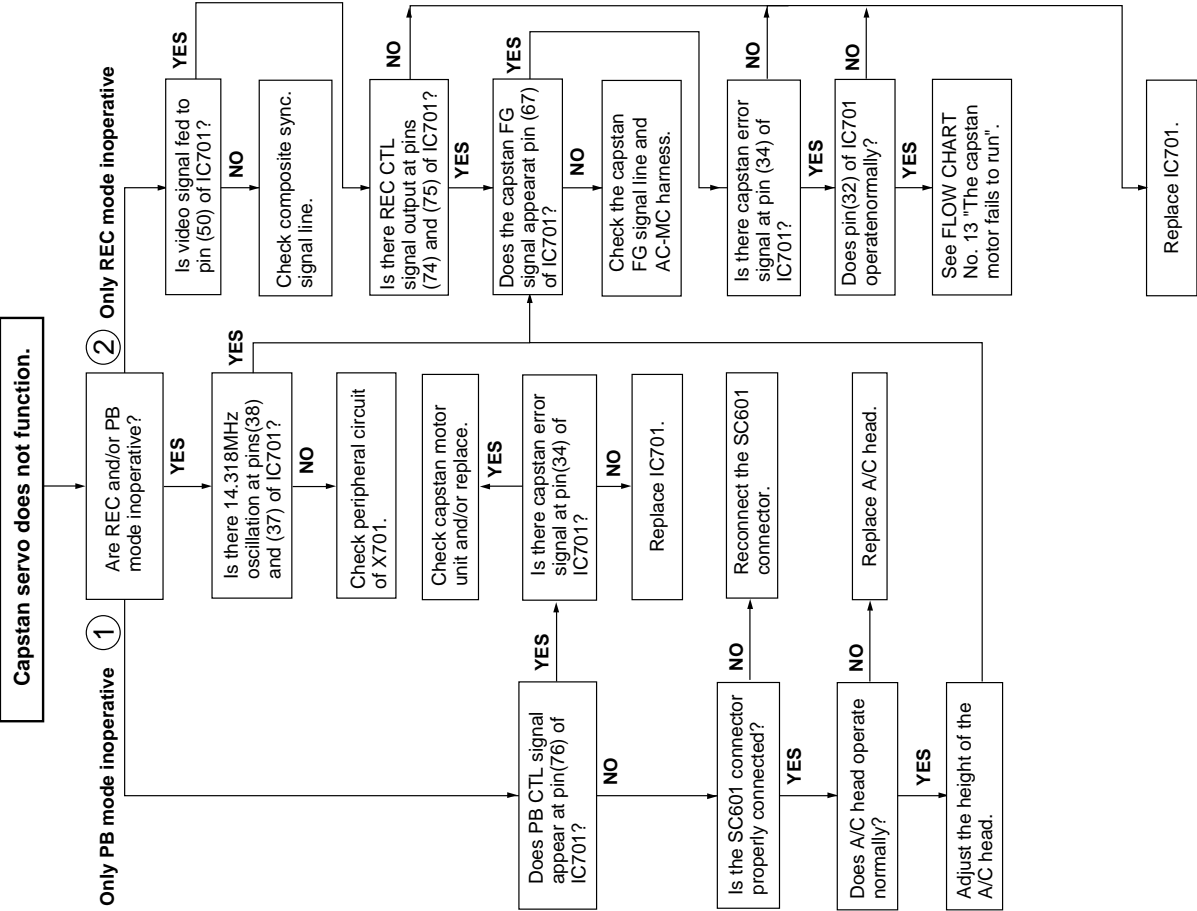
FLOW CHART NO.15 DRUM MOTOR TROUBLESHOOTING(2)



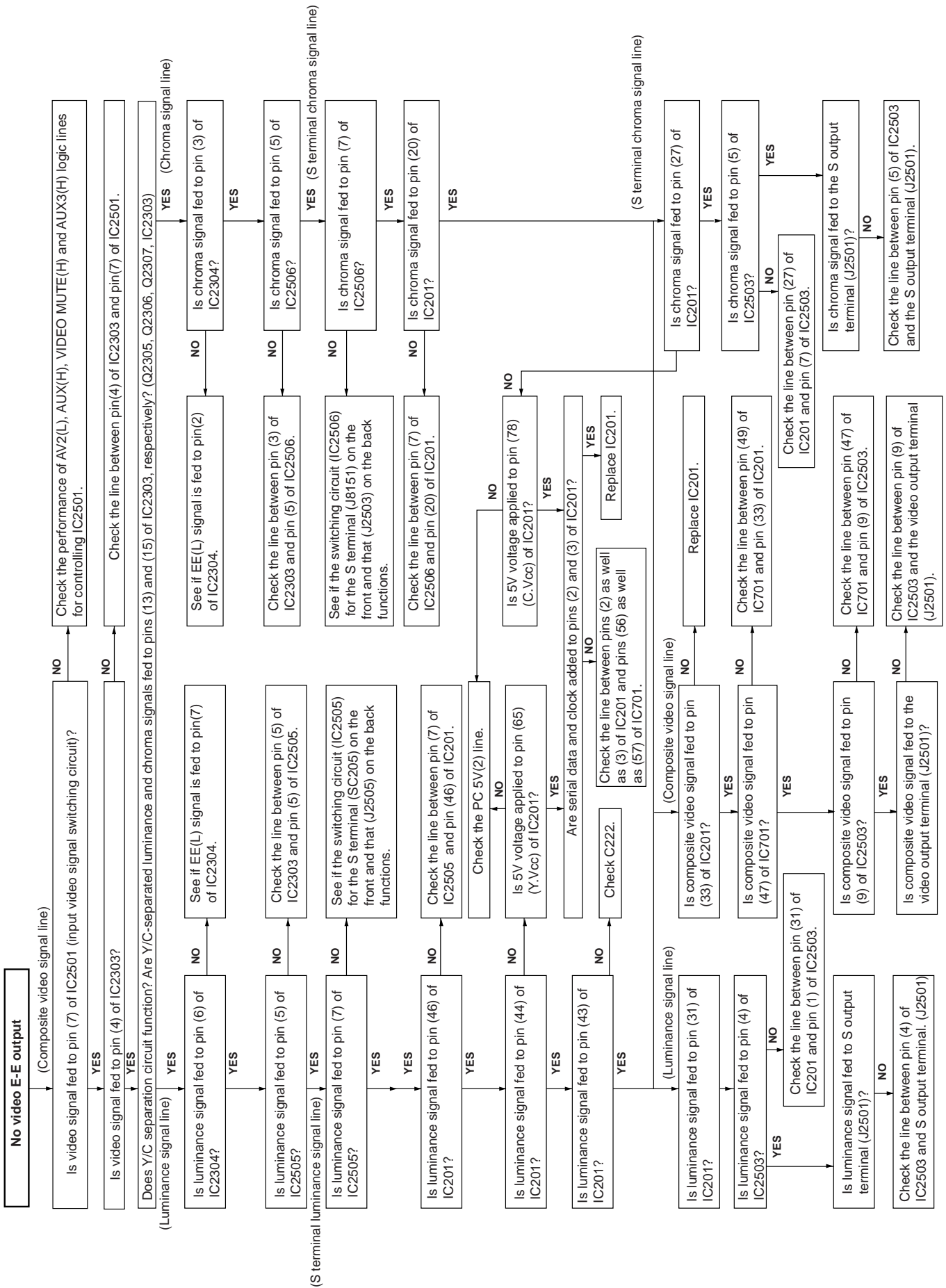
FLOW CHART NO.17 DRUM SERVO TROUBLESHOOTING



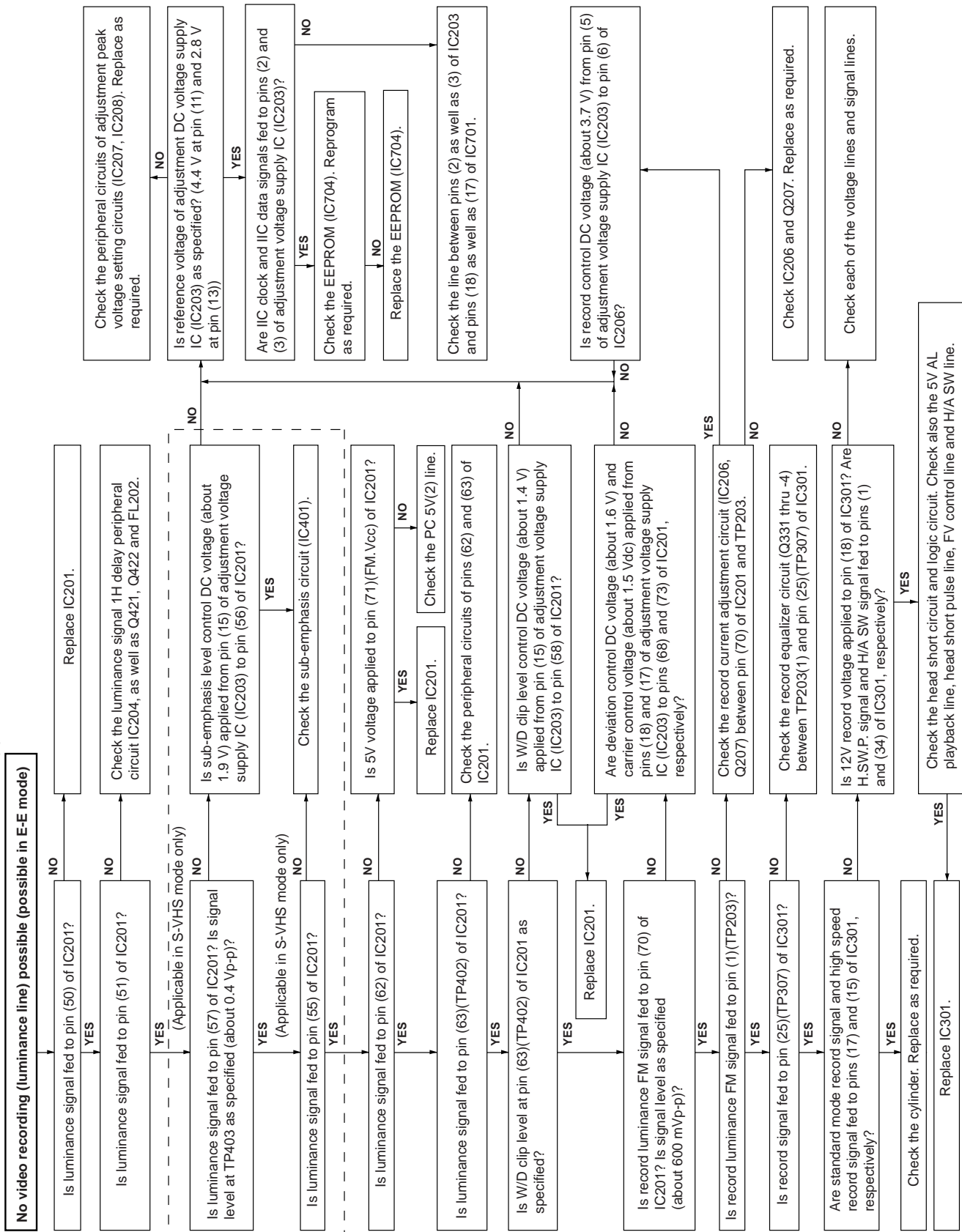
FLOW CHART NO.18 CAPSTAN SERVO TROUBLESHOOTING



FLOW CHART NO.19 E-E MODE TROUBLESHOOTING

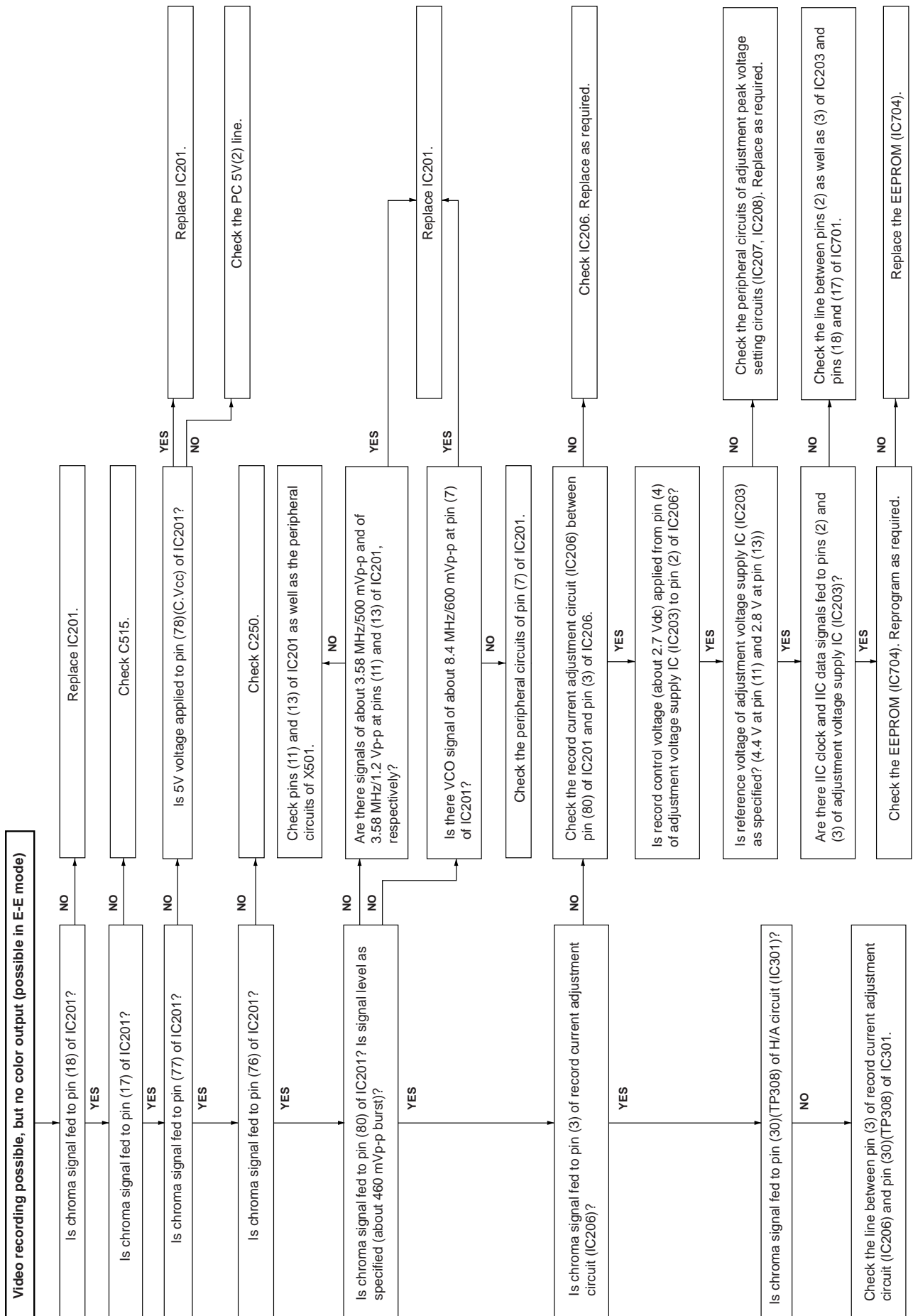


# FLOW CHART NO.20 RECORDING MODE TROUBLESHOOTING (1)

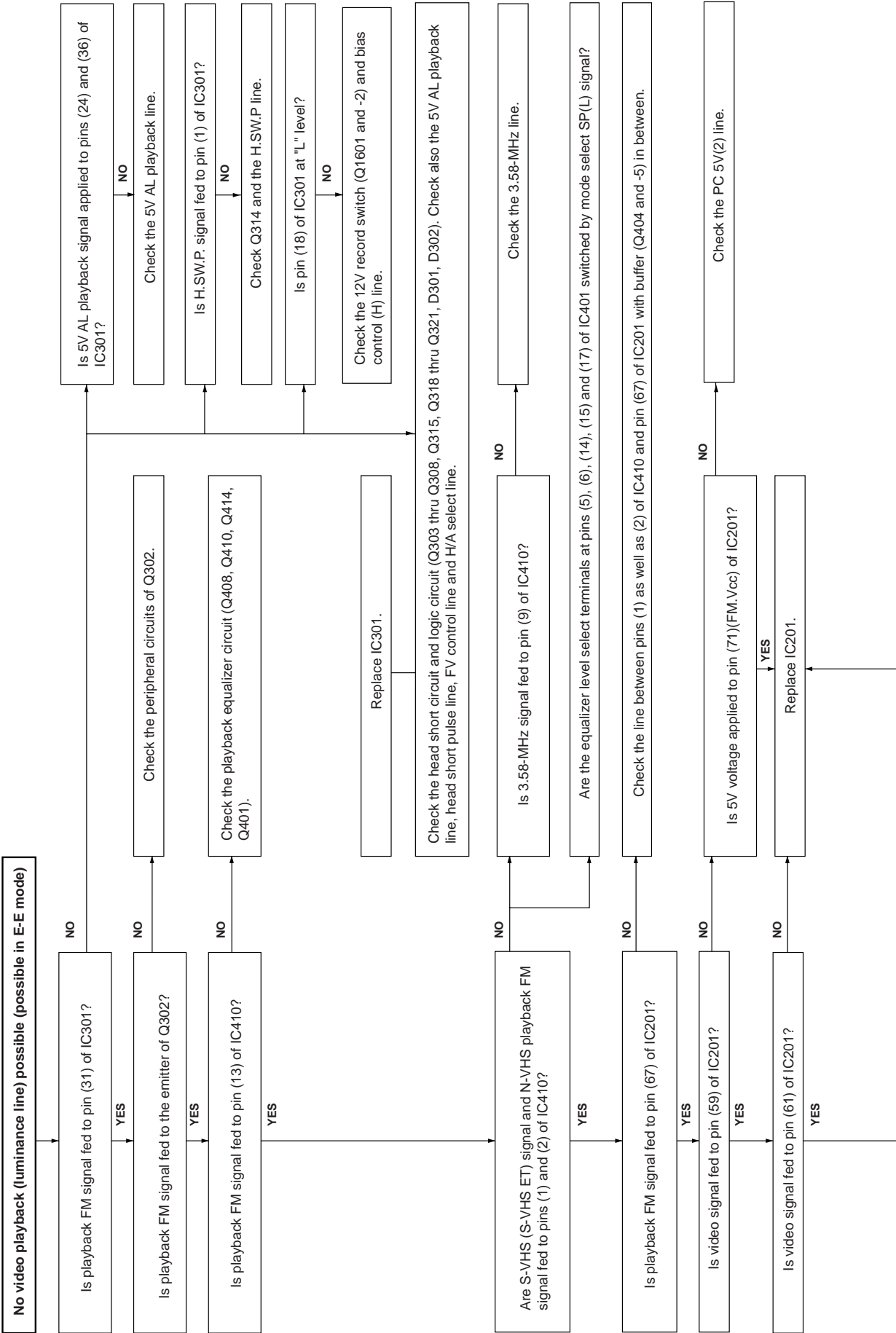




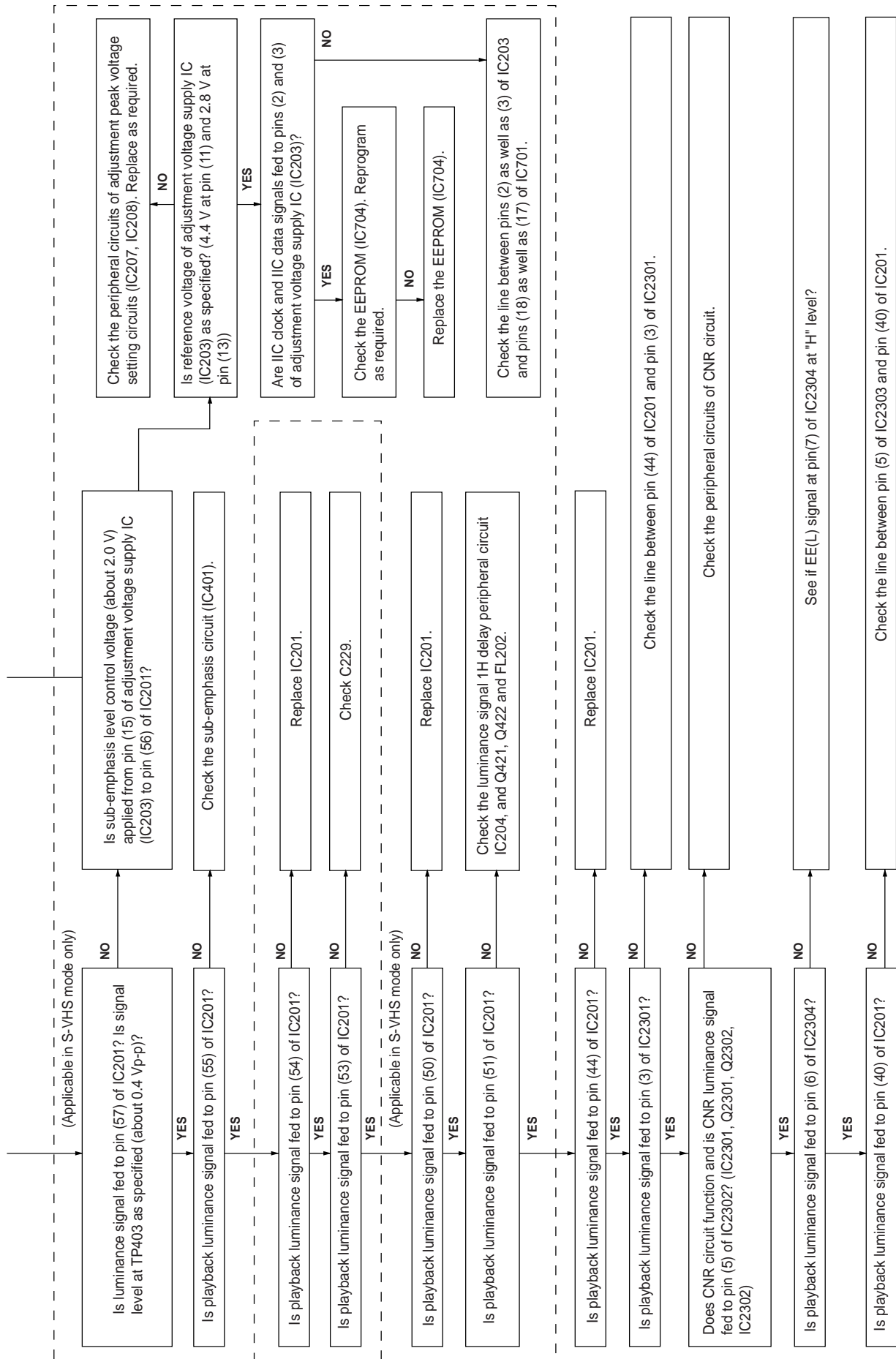
# FLOW CHART NO.21 RECORDING MODE TROUBLESHOOTING (2)



FLOW CHART NO.22 PLAYBACK MODE TROUBLESHOOTING (1)

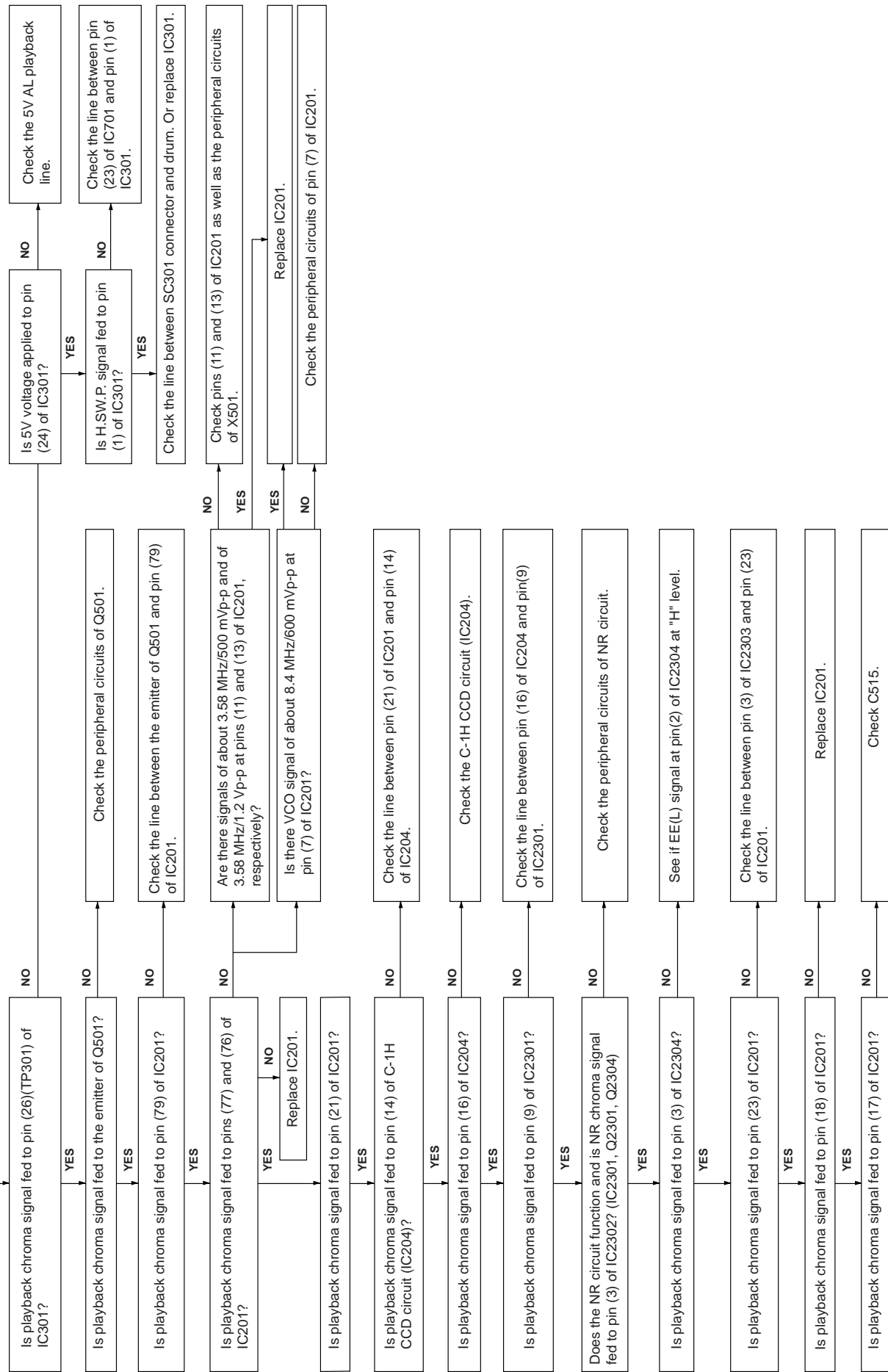


# FLOW CHART NO.22 PLAYBACK MODE TROUBLESHOOTING (1) (CONTINUED)

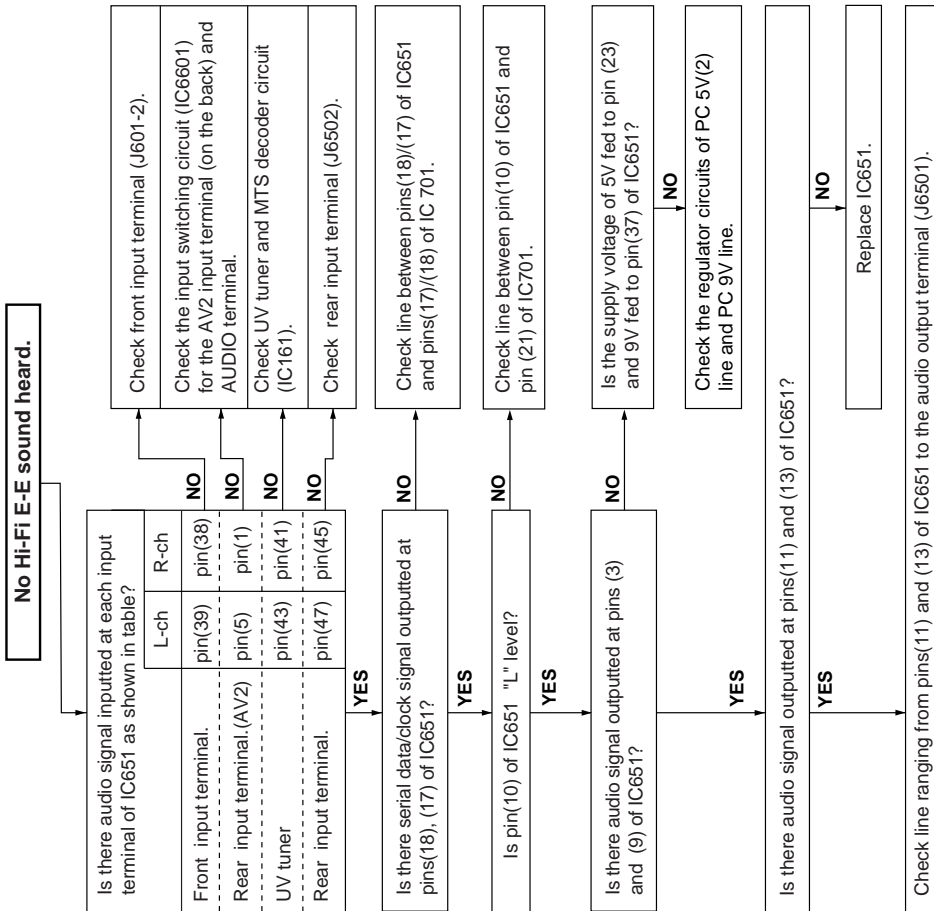


## FLOW CHART NO.23 PLAYBACK MODE TROUBLESHOOTING (2)

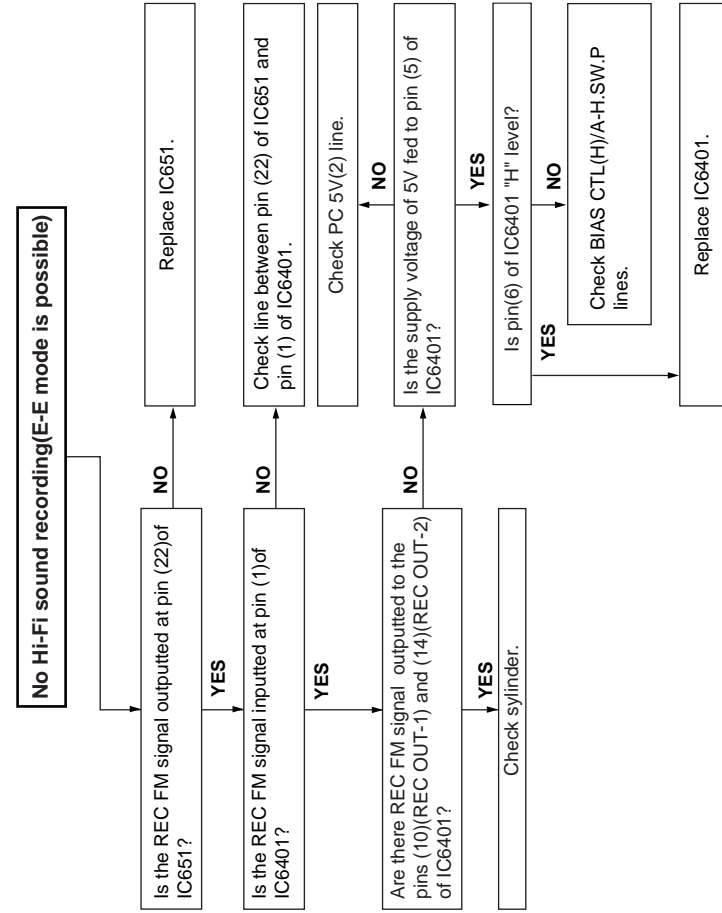
Video recording possible, but no color output (possible in E-E mode)



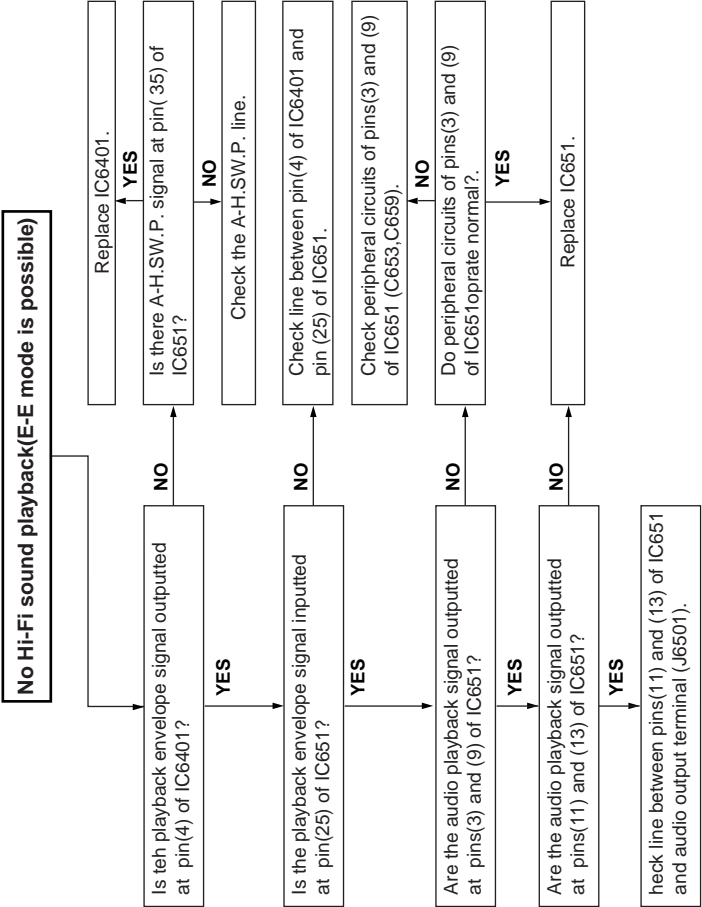
FLOW CHART NO.24 HI-FI SOUND MODE TROUBLESHOOTING(1)



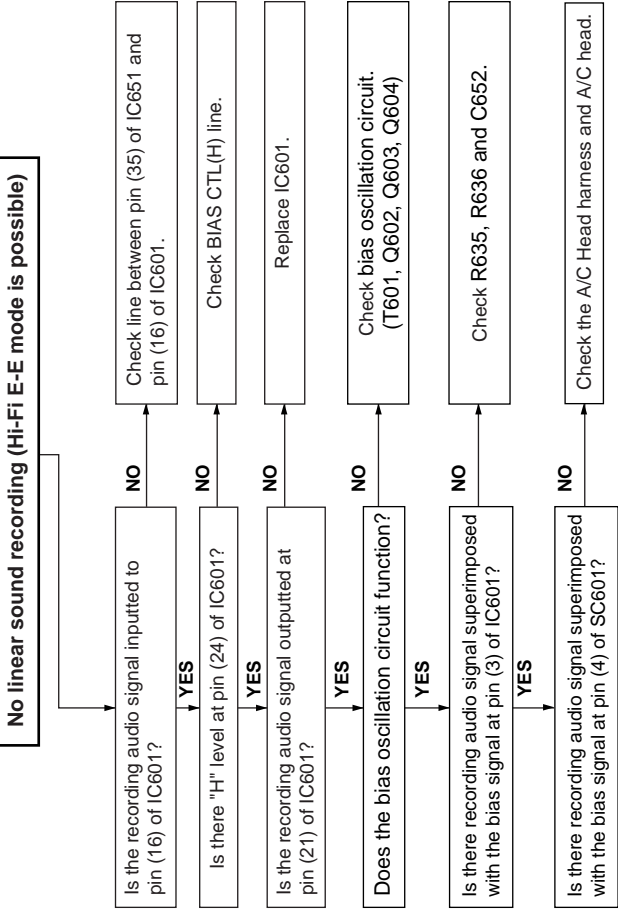
FLOW CHART NO.25 HI-FI SOUND MODE TROUBLESHOOTING(2)



FLOW CHART NO.23 HI-FI SOUND MODE TROUBLESHOOTING(3)

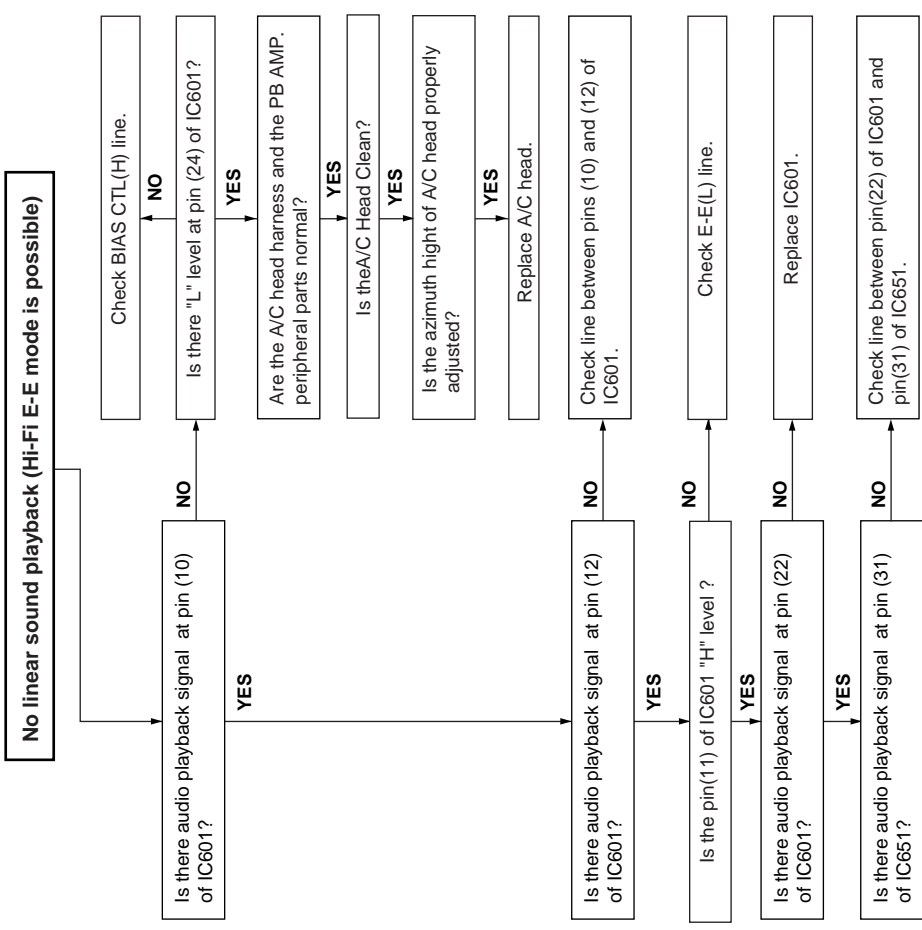


FLOW CHART NO.28 LINEAR SOUND MODE TROUBLESHOOTING (1)



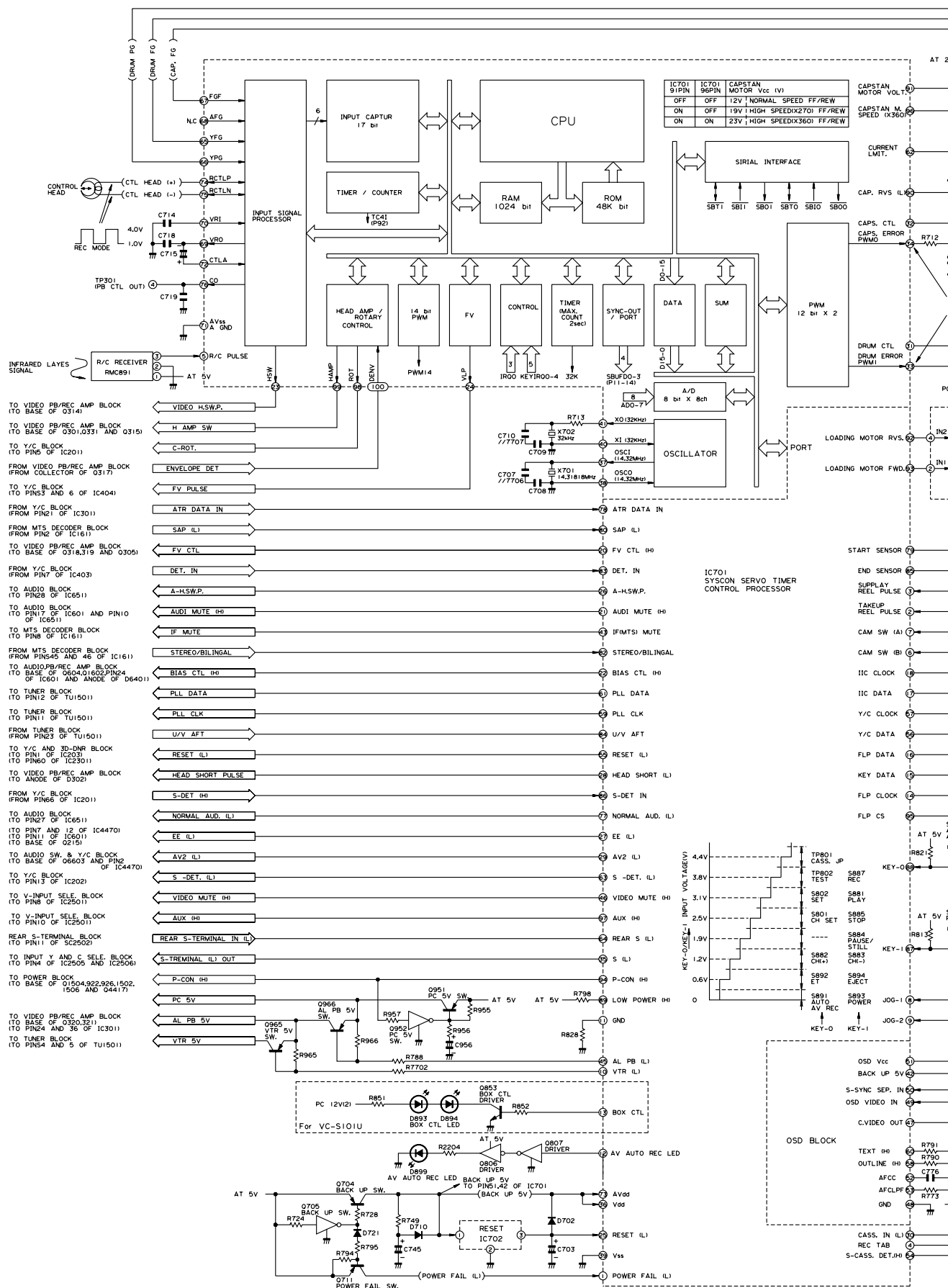


FLOW CHART NO.29 LINEAR SOUND MODE TROUBLESHOOTING (2)

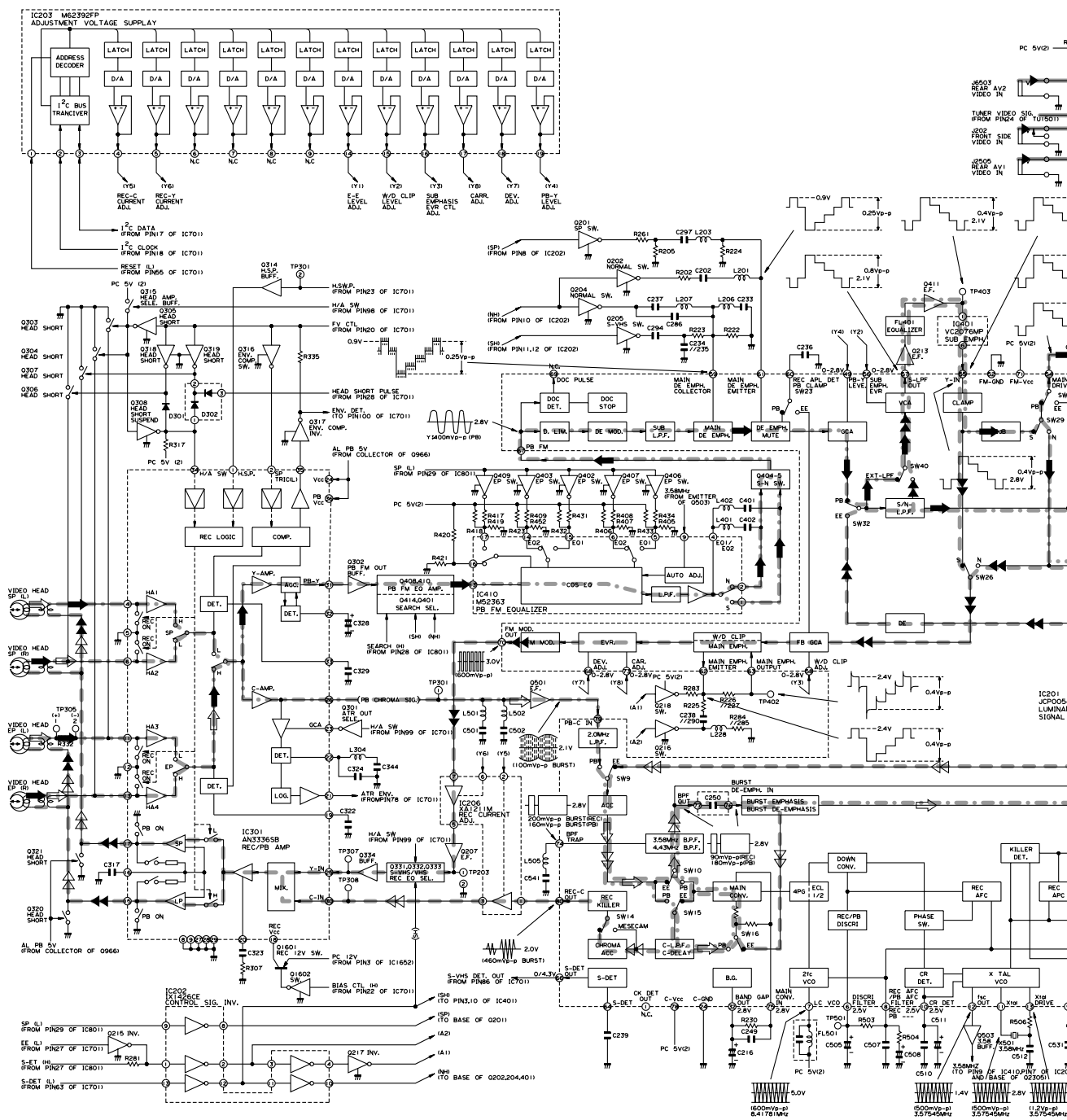
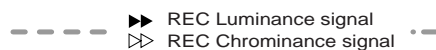


## 8. BLOCK DIAGRAM

### SYSTEM SERVO BLOCK DIAGRAM

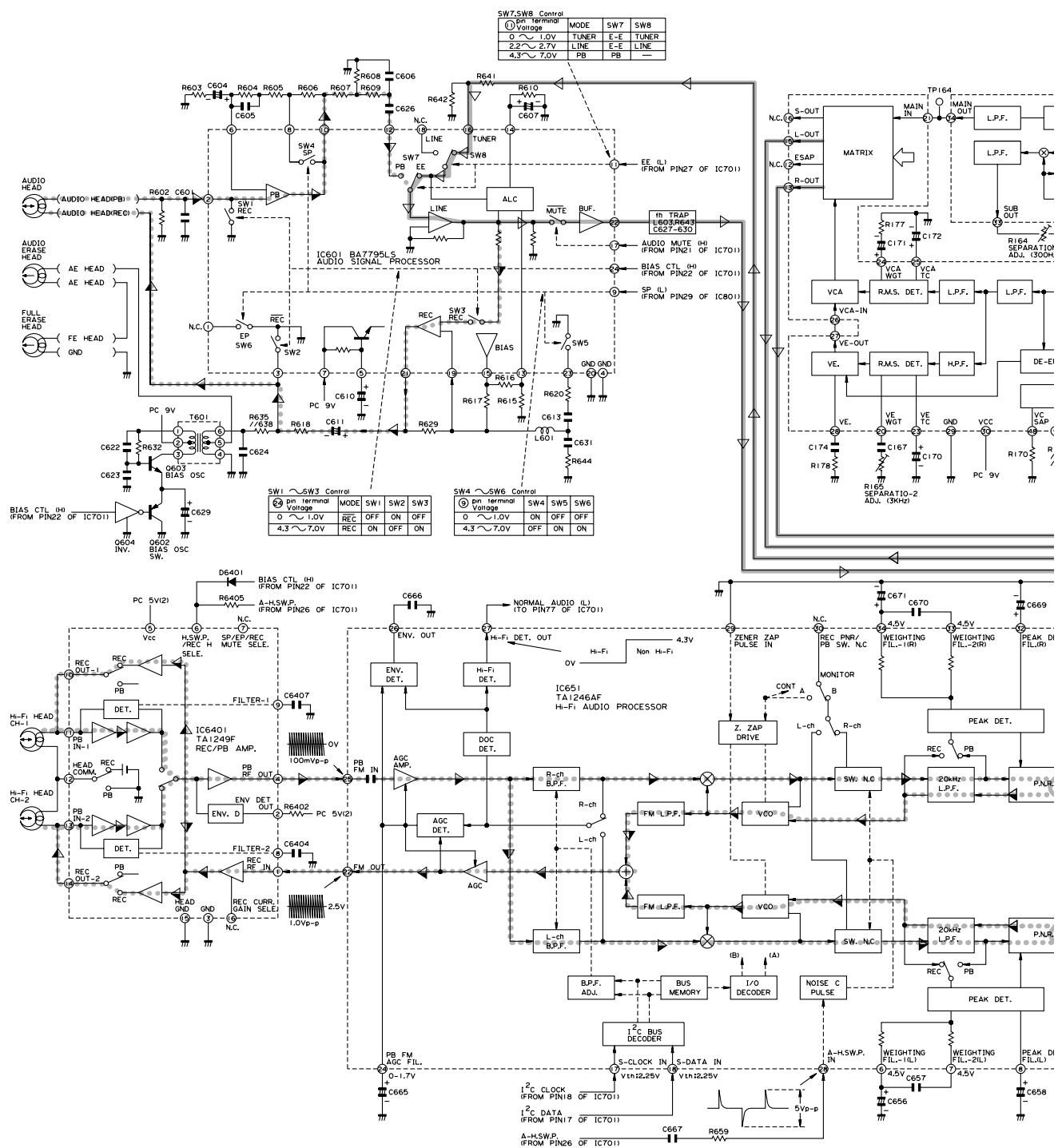




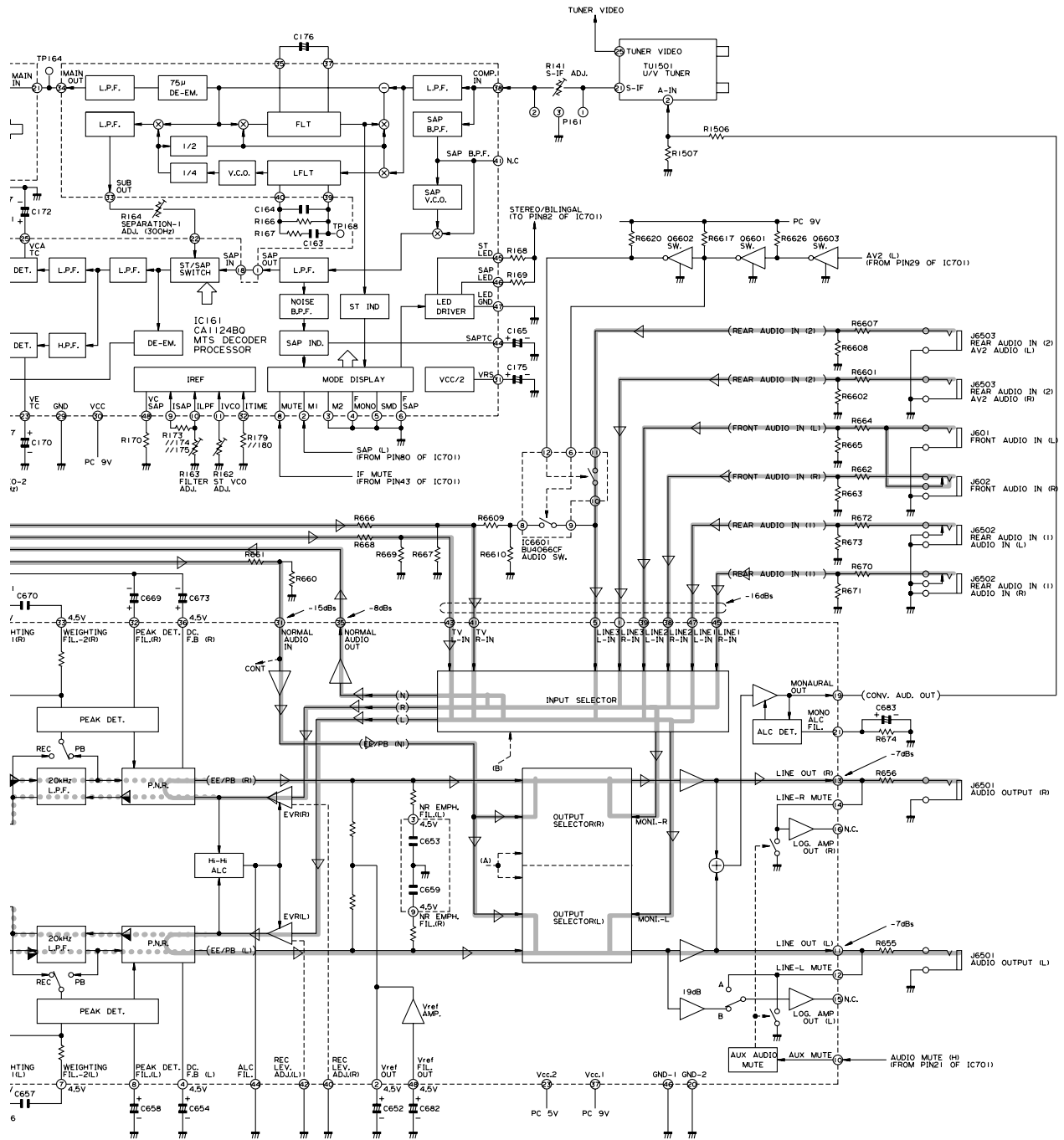




AUDIO BLOCK DIAGRAM



..... ▷ REC Signal    ——— ▷ EE Signal  
 ▷ PB Signal









## SCHEMATIC DIAGRAM

### IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "  " (  ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET.

BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

- The indicated voltages in the following diagram are measured with an SSVM, upon receiving color bars (400 Hz sound signal) in either the record mode or the play mode voltage is indicated as follows.



4.0 . . . . Record mode (SP)

(4.0) . . . . PB mode (SP)

4.0 . . . . LP mode

4.0 . . . . EP mode

### AVIS DE SECURITE IMPORTANT:

LES PIECES MARQUEES "  " (  ) SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.

NE REMPLACER CES PIECES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

### NOTE:

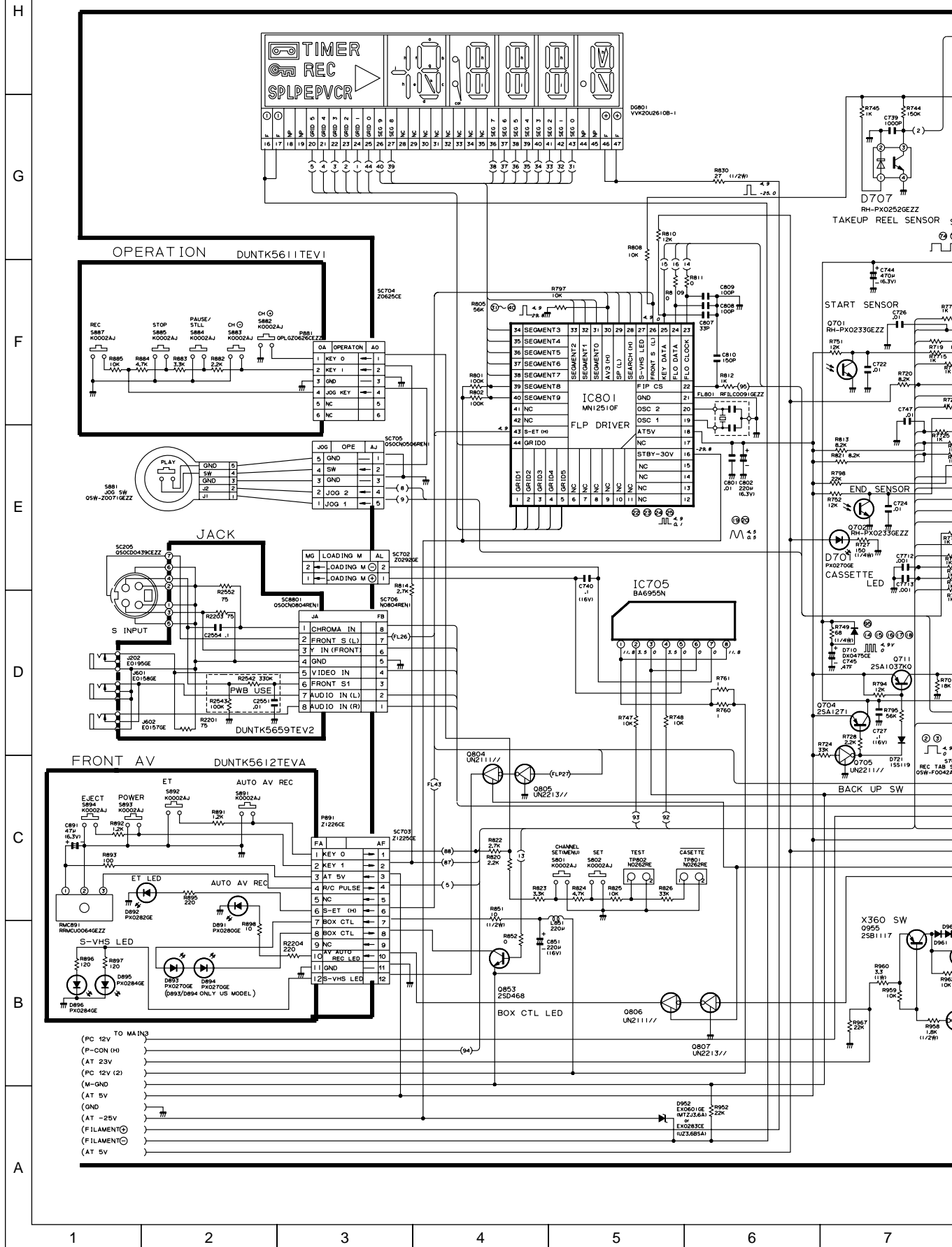
- The unit of resistance "ohm" is omitted (K: 1000 ohms M: 1 Meg ohm).
- All resistors are 1/8 watt, unless otherwise noted.
- All capacitors  $\mu F$ , unless otherwise noted P:  $\mu\mu F$ .

Voltages and waveform are measured as follows:

- DC voltages are measured with an SSVM placed between points indicated and chassis ground, with the supply voltage of 120V AC and all controls for normal positions.

This circuit diagram is a standard one, actual circuits printed may be subject to change for product improvement without prior notice.

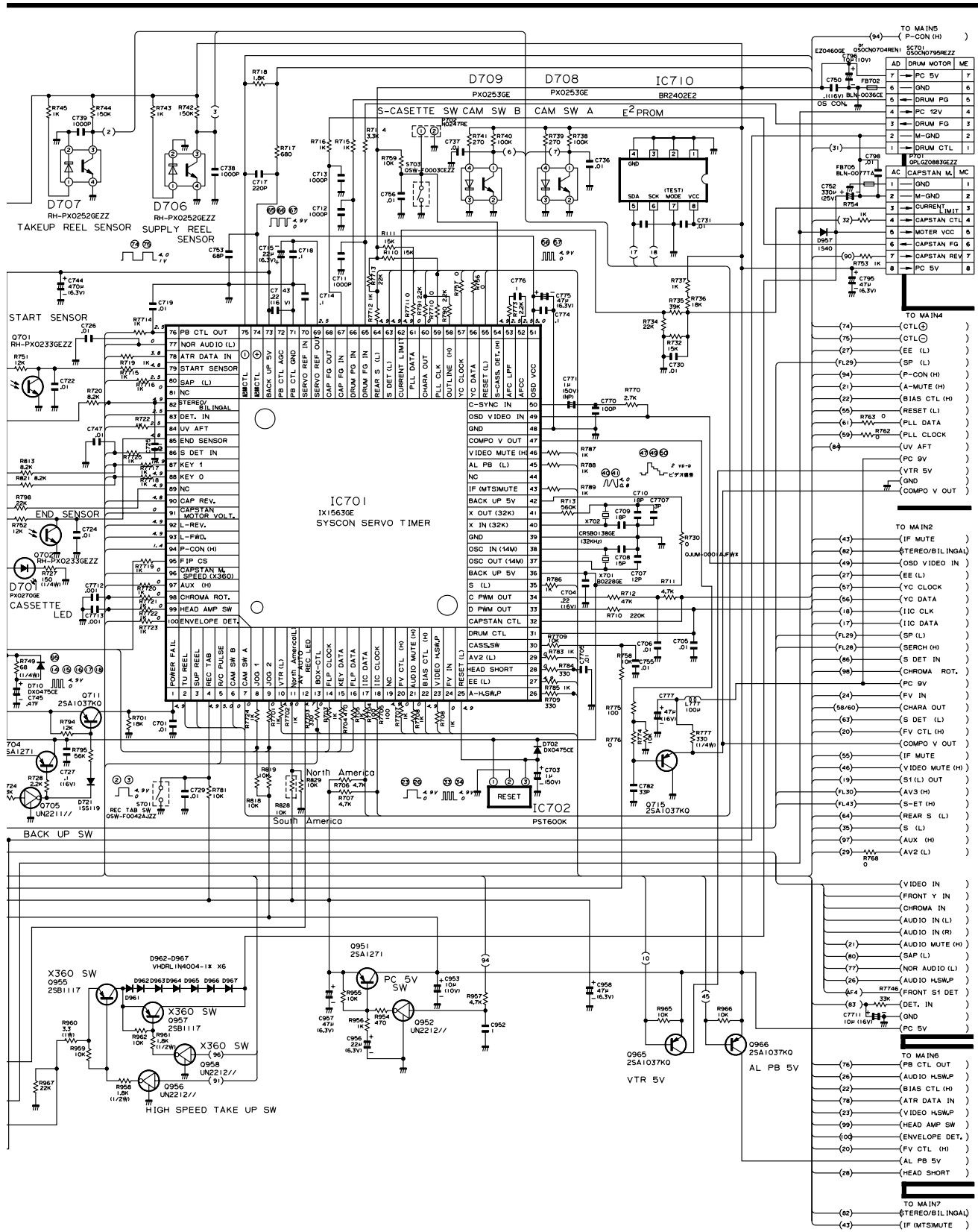
# 9. SCHEMATIC DIAGRAM AND PWB FOIL PATTERN MAIN CIRCUIT(1)



\* VOLTAGE MEASUREMENT MODE

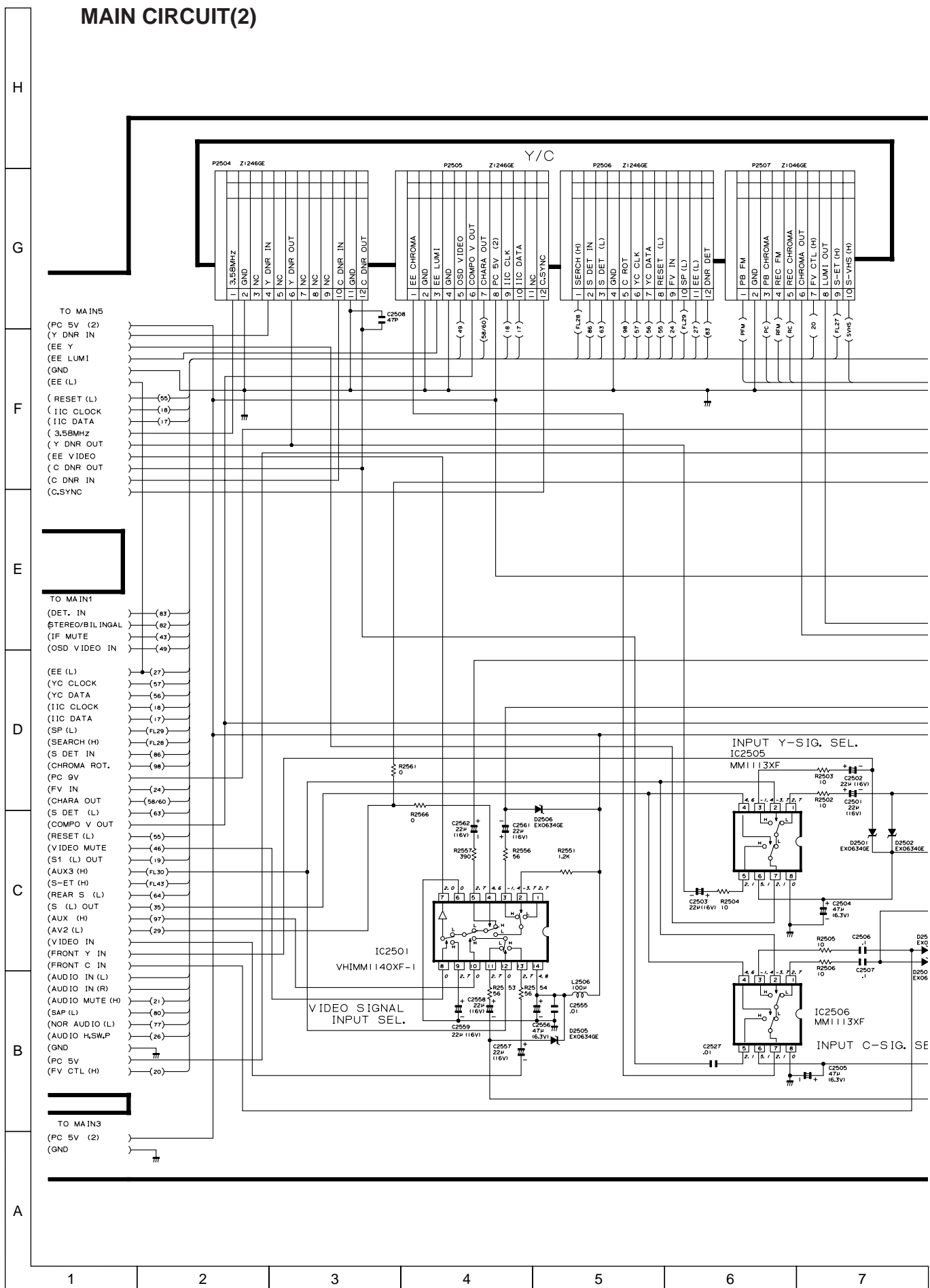
PB ..... Parentheses ( )

REC ... Without Parentheses



7	8	9	10	11	12	13
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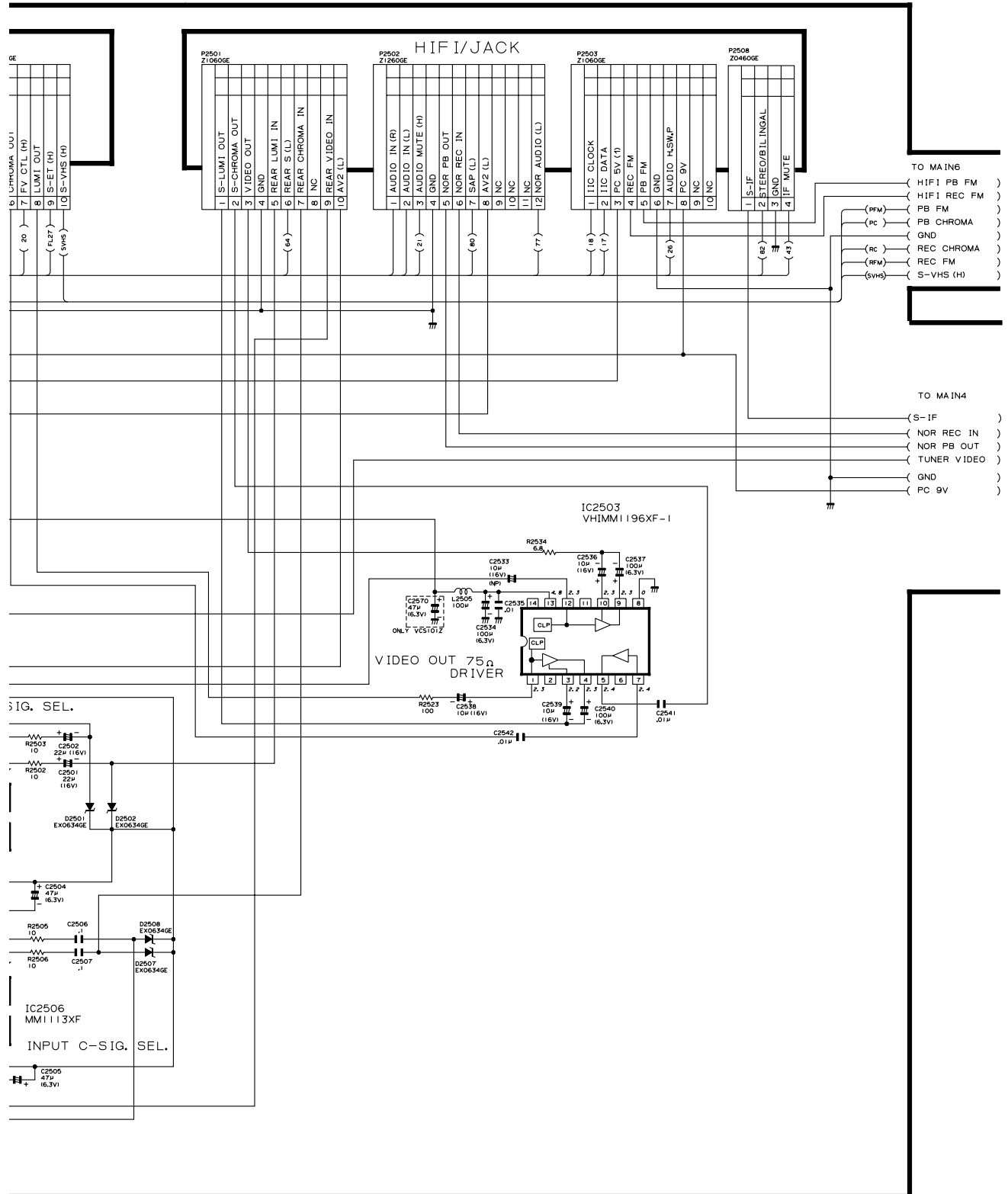
## MAIN CIRCUIT(2)



\* VOLTAGE MEASUREMENT MODE

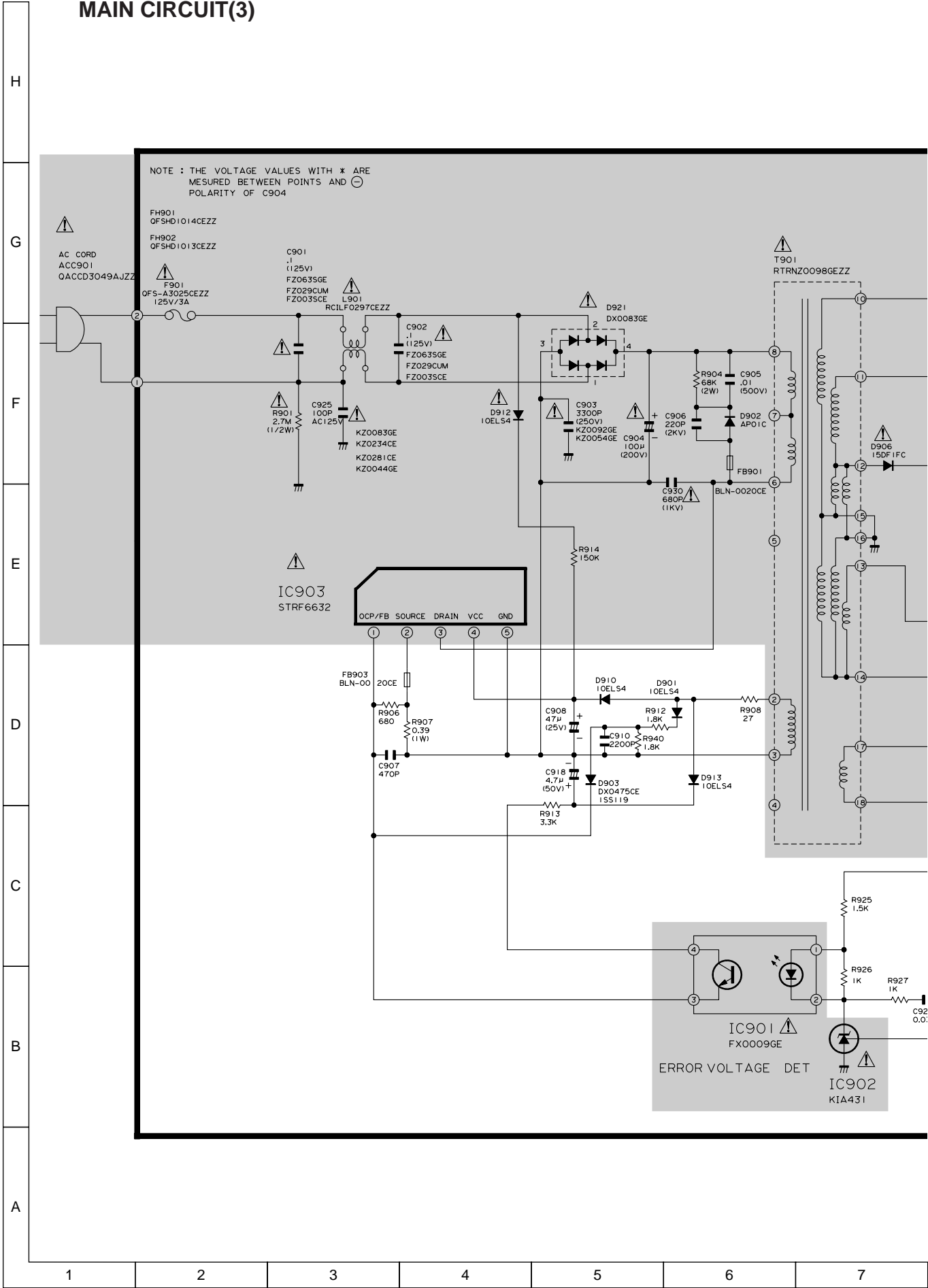
**PB ..... Parentheses ( )**

### REC ... Without Parentheses



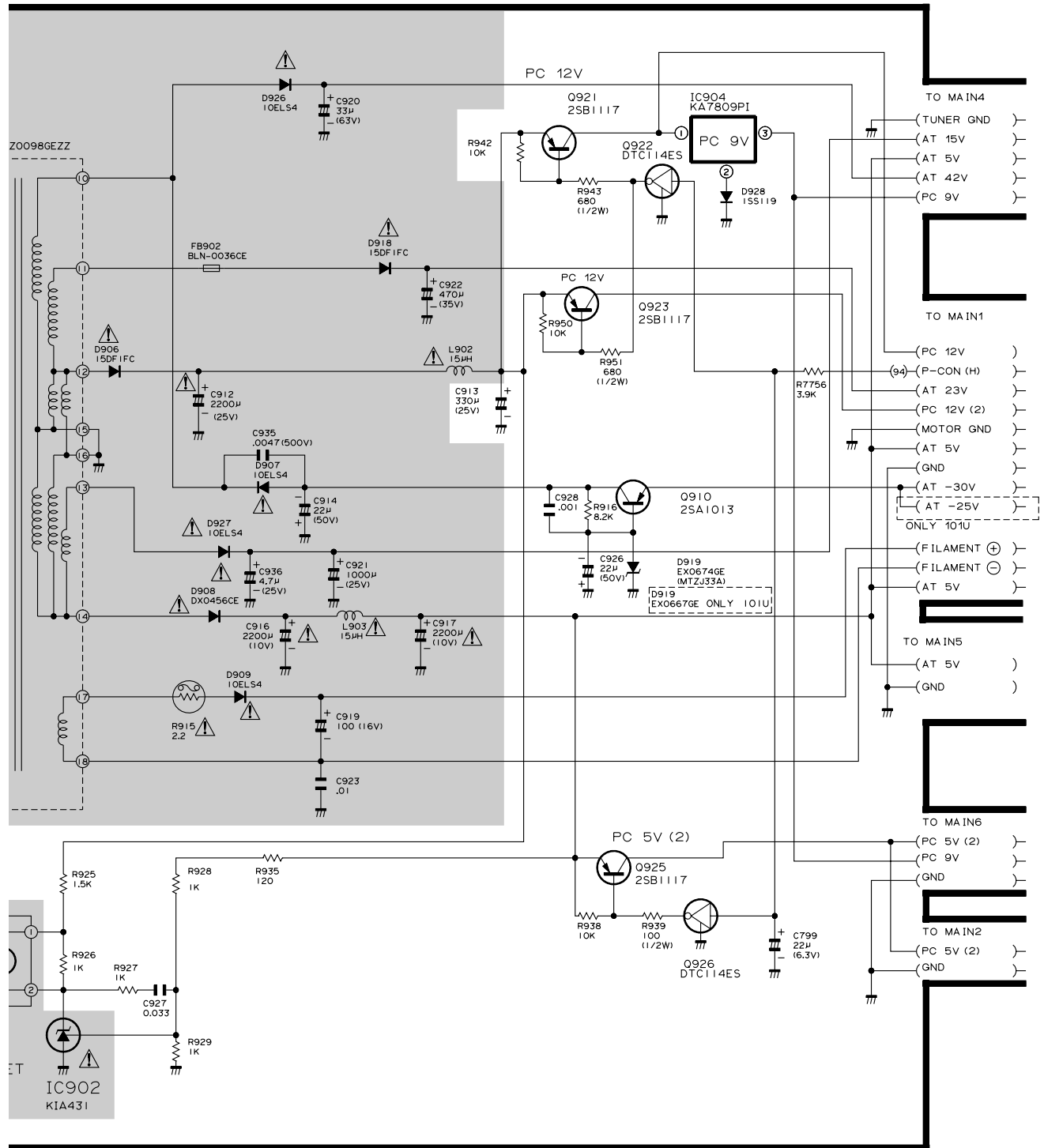
7	8	9	10	11	12	13
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MAIN CIRCUIT(3)

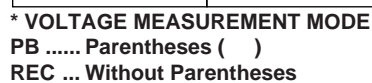


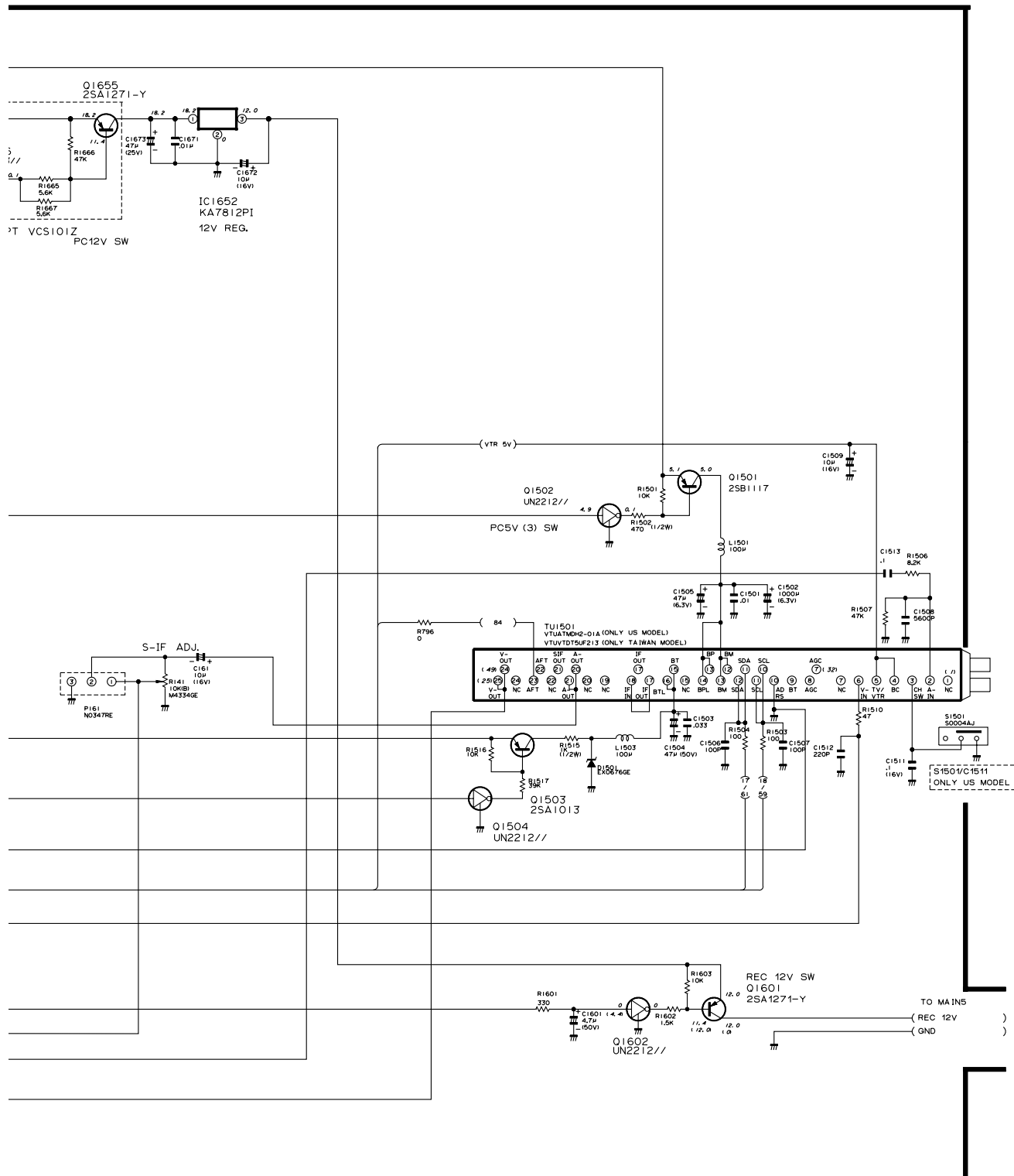
\* VOLTAGE MEASUREMENT MODE  
PB ..... Parentheses ( )  
REC ... Without Parentheses





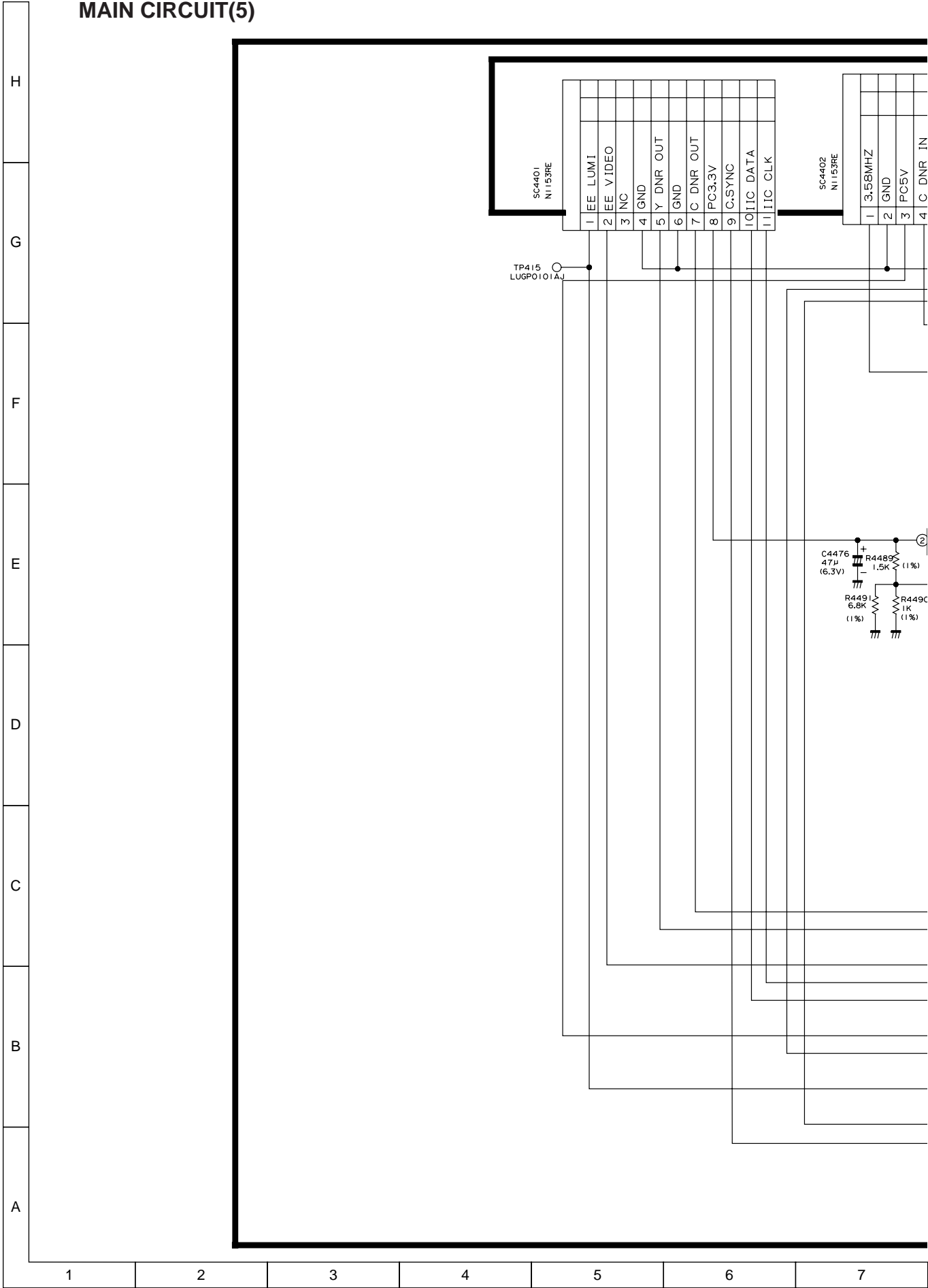
7	8	9	10	11	12	13
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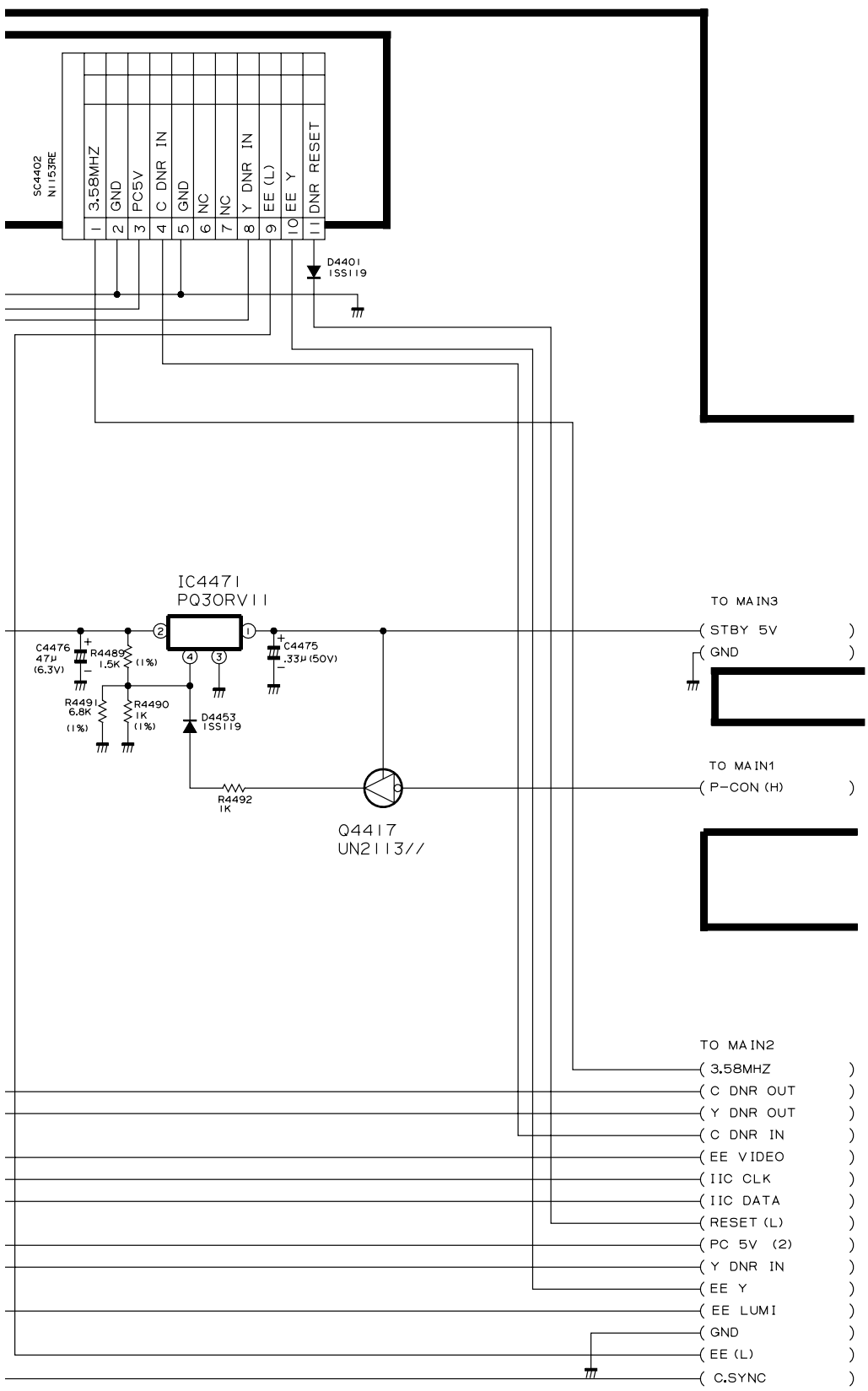


7	8	9	10	11	12	13
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MAIN CIRCUIT(5)

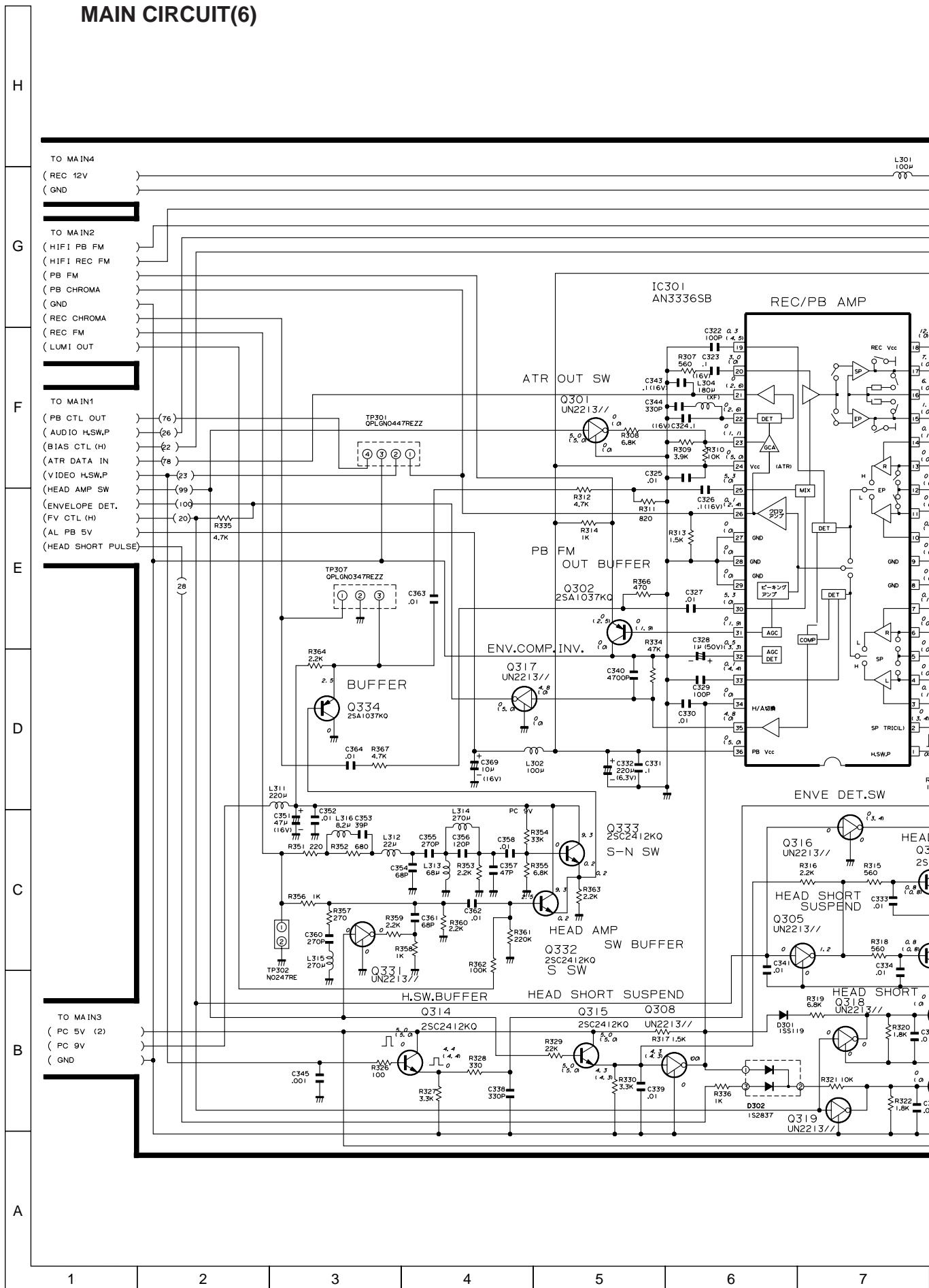


\* VOLTAGE MEASUREMENT MODE  
PB ..... Parentheses ( )  
REC ... Without Parentheses



7	8	9	10	11	12	13
---	---	---	----	----	----	----

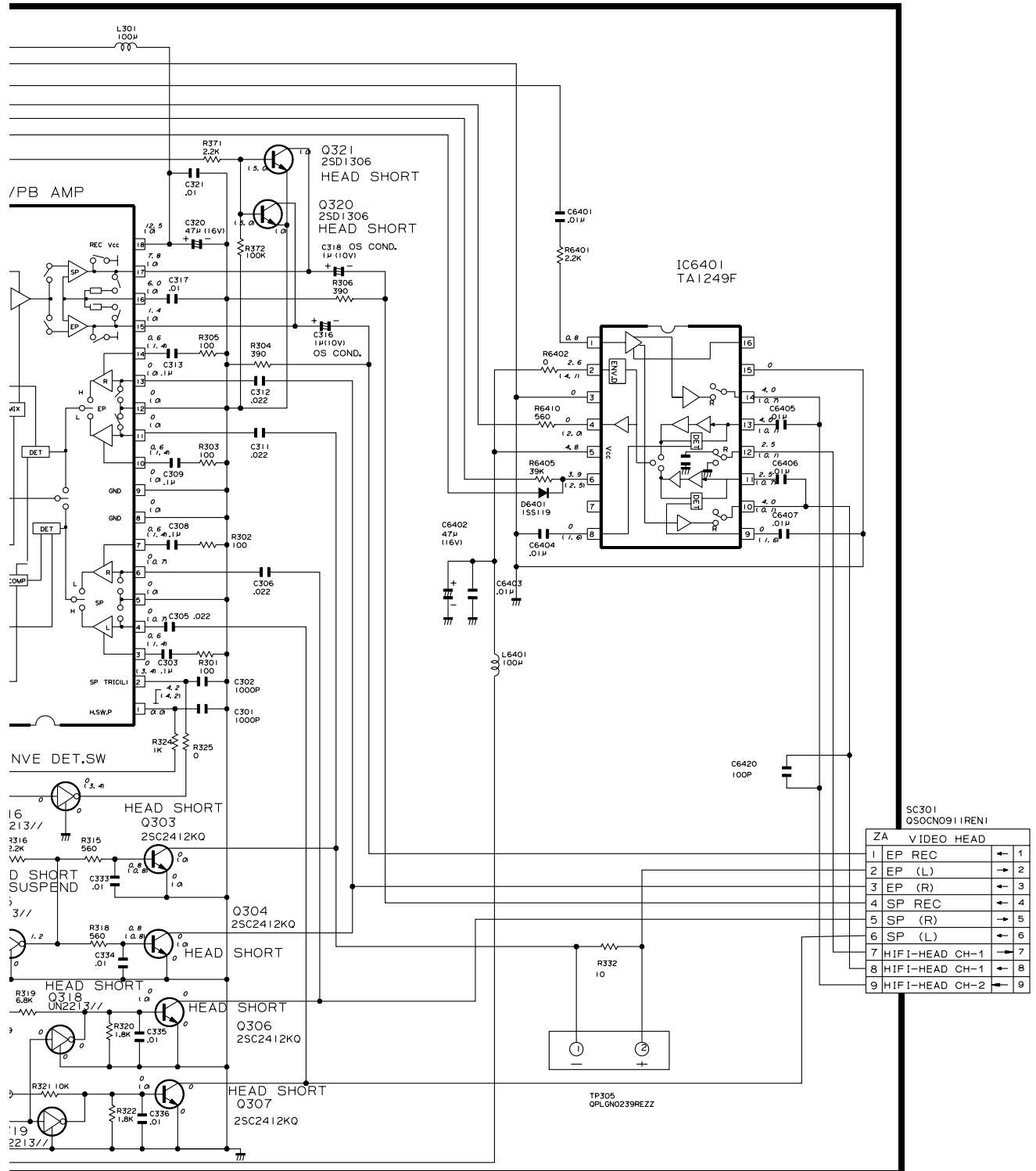
## MAIN CIRCUIT(6)



\* VOLTAGE MEASUREMENT MODE

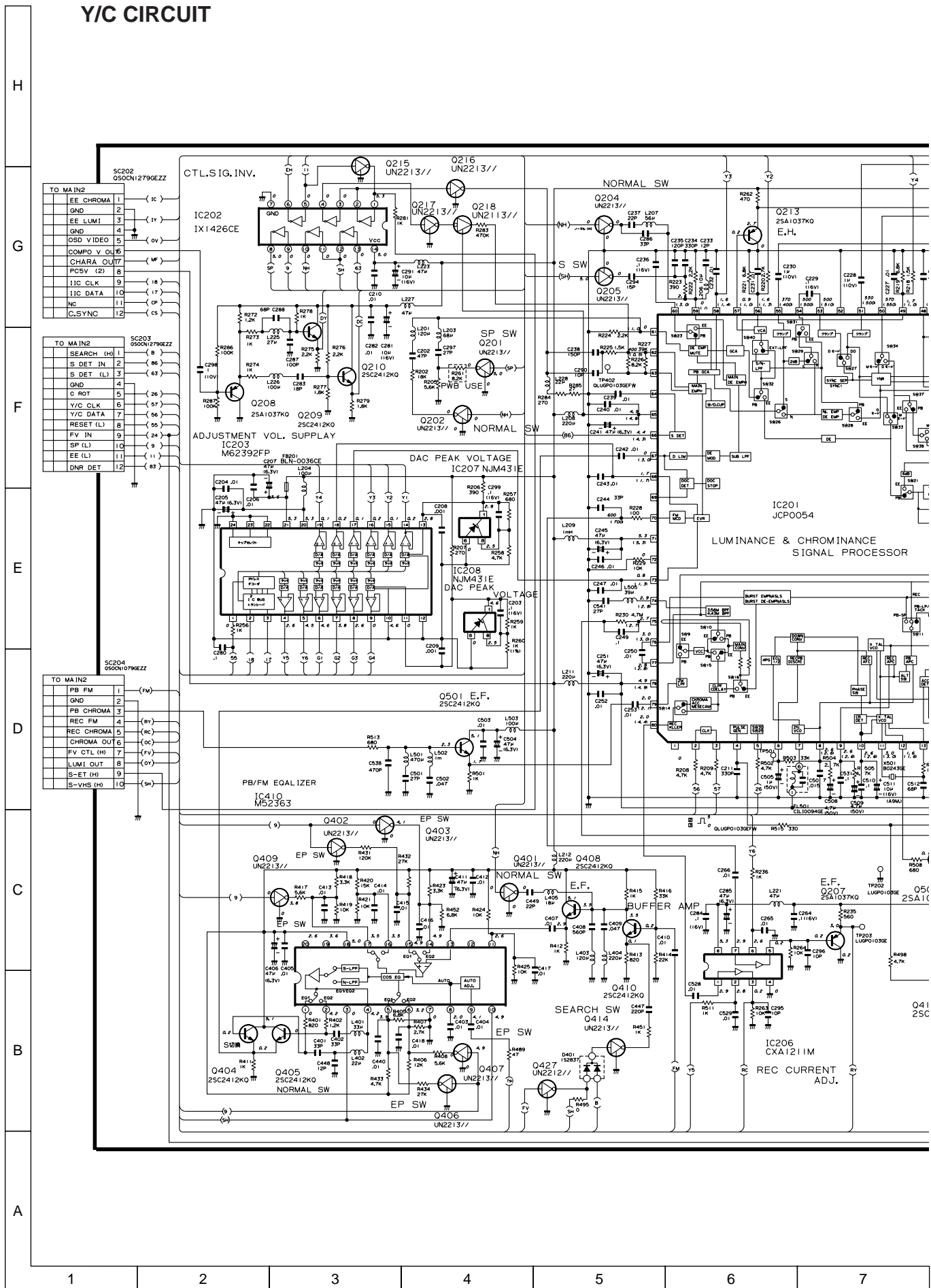
PB ..... Parentheses ( )

REC ... Without Parentheses





## Y/C CIRCUIT



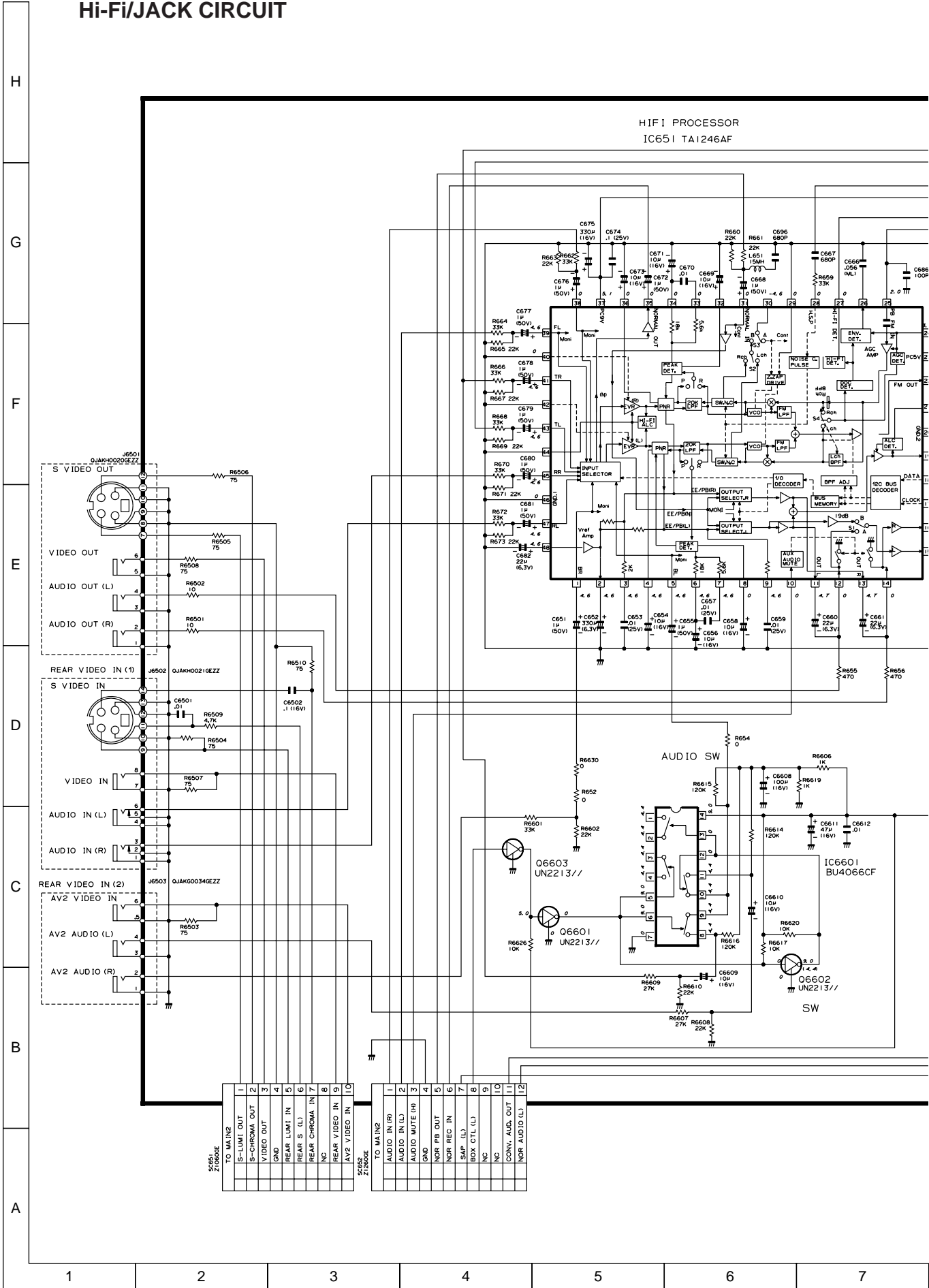
\* VOLTAGE MEASUREMENT MODE

PB ..... Parentheses ( )

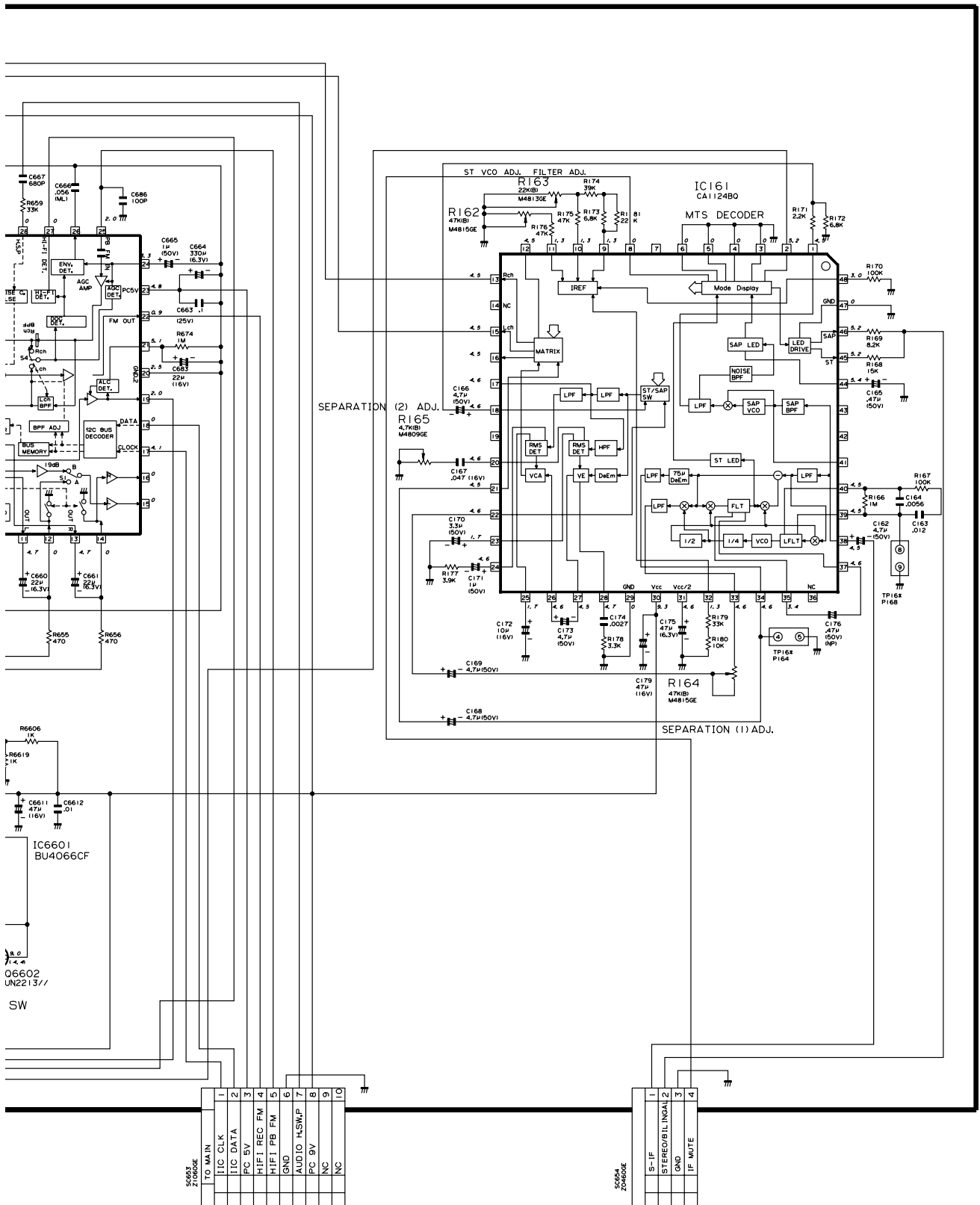
REC ... Without Parentheses



Hi-Fi/JACK CIRCUIT

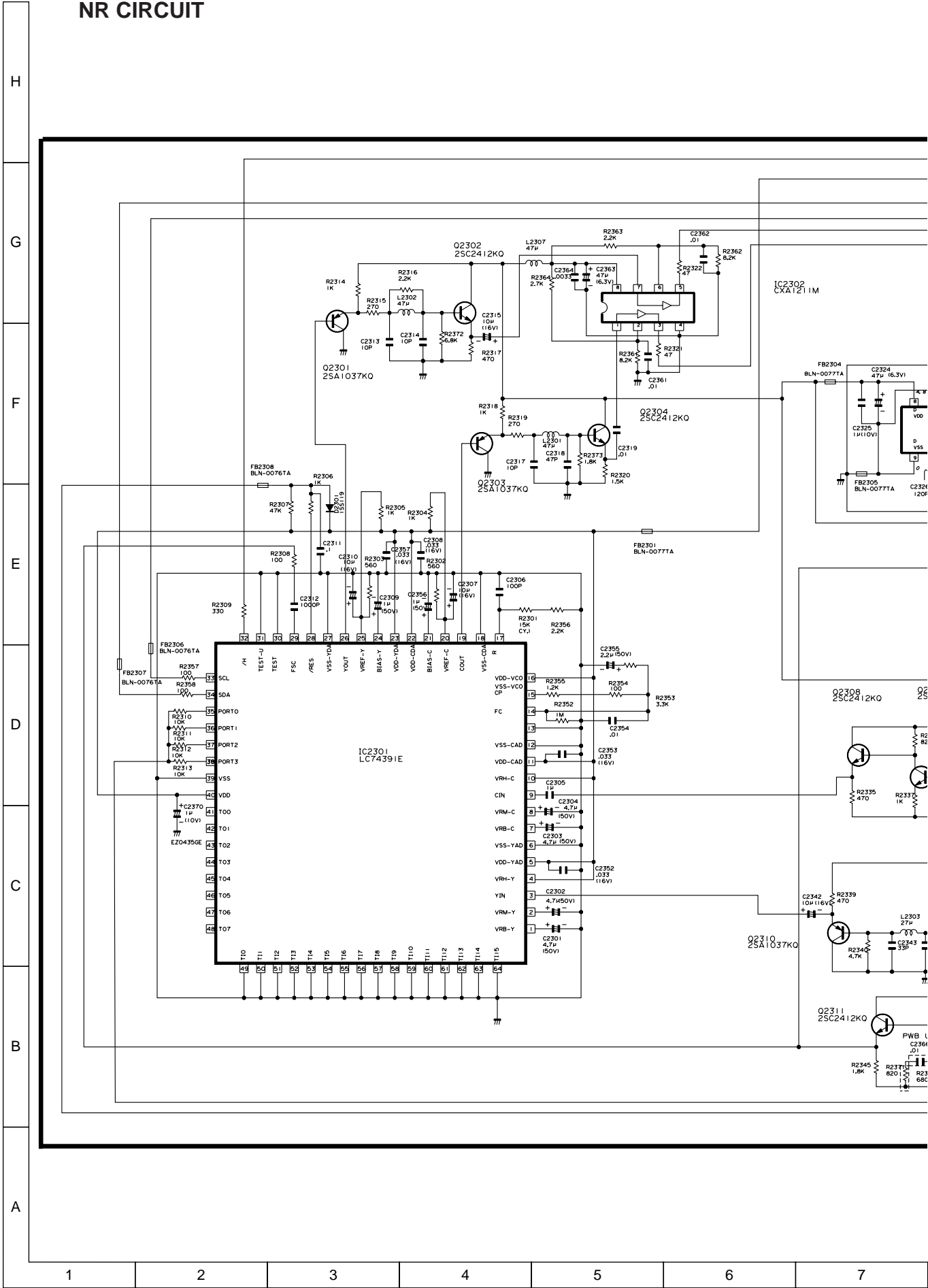


\* VOLTAGE MEASUREMENT MODE  
PB ..... Parentheses ( )  
REC ... Without Parentheses

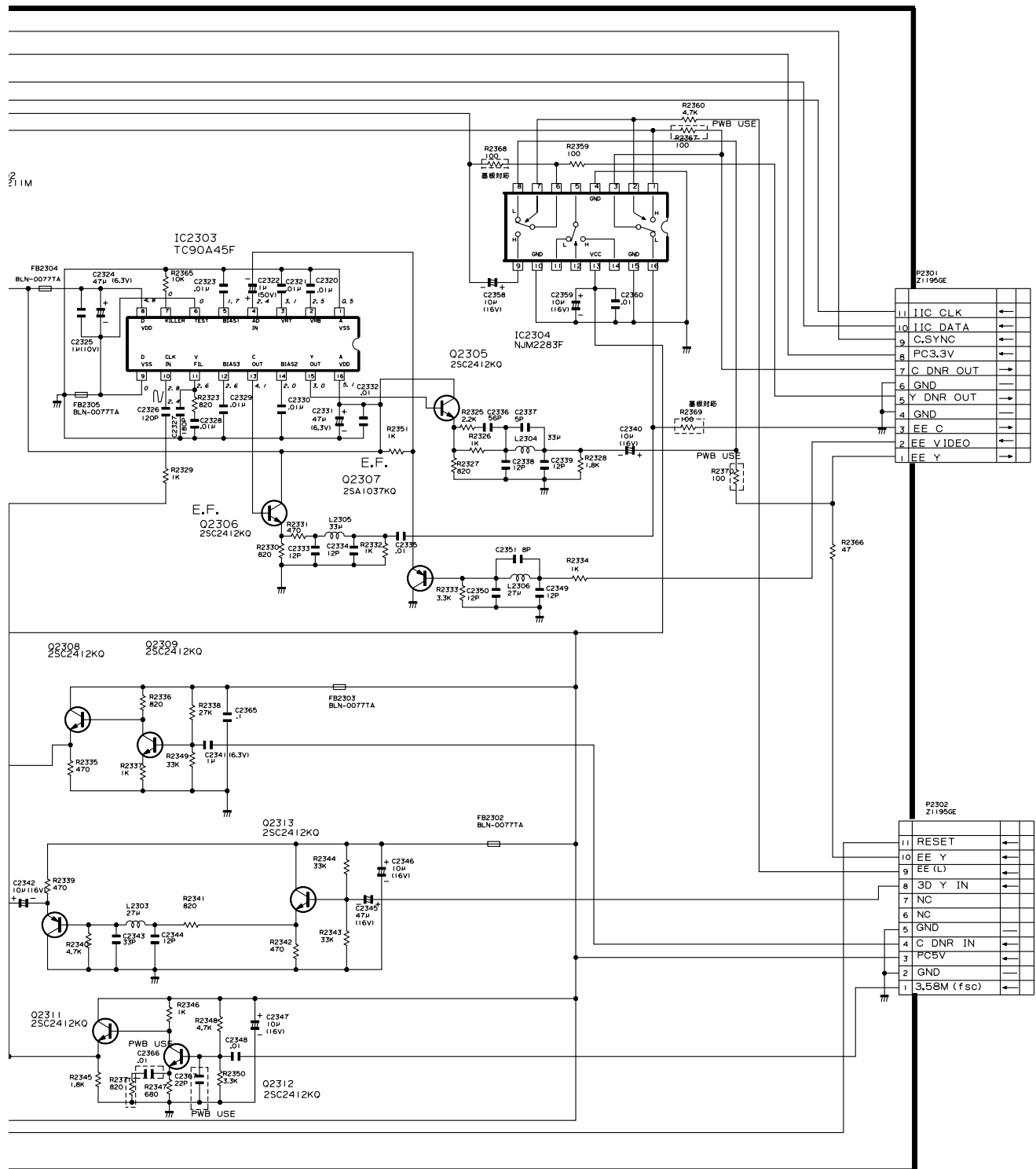


7	8	9	10	11	12	13
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NR CIRCUIT

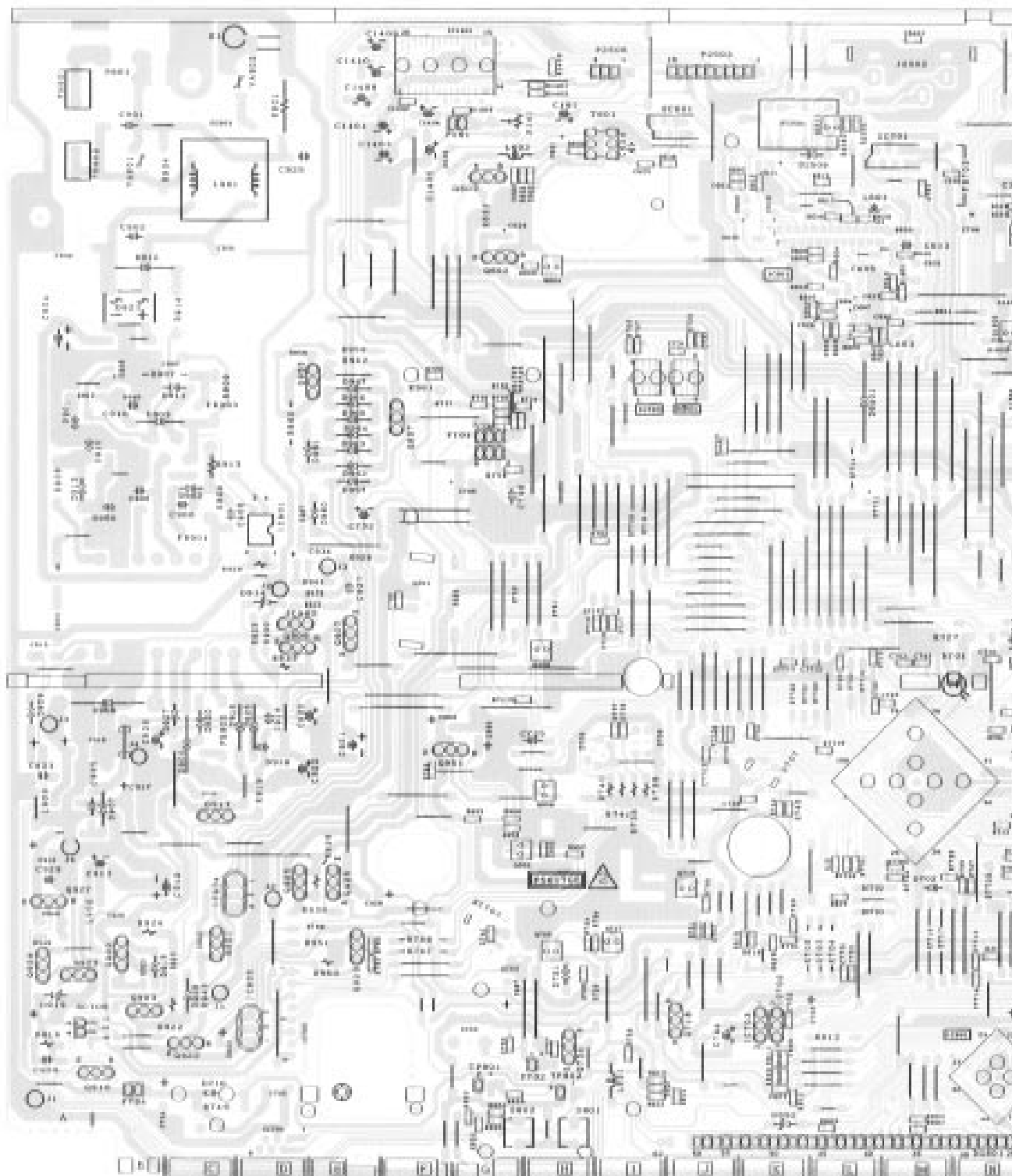


\* VOLTAGE MEASUREMENT MODE  
PB ..... Parentheses ( )  
REC ... Without Parentheses

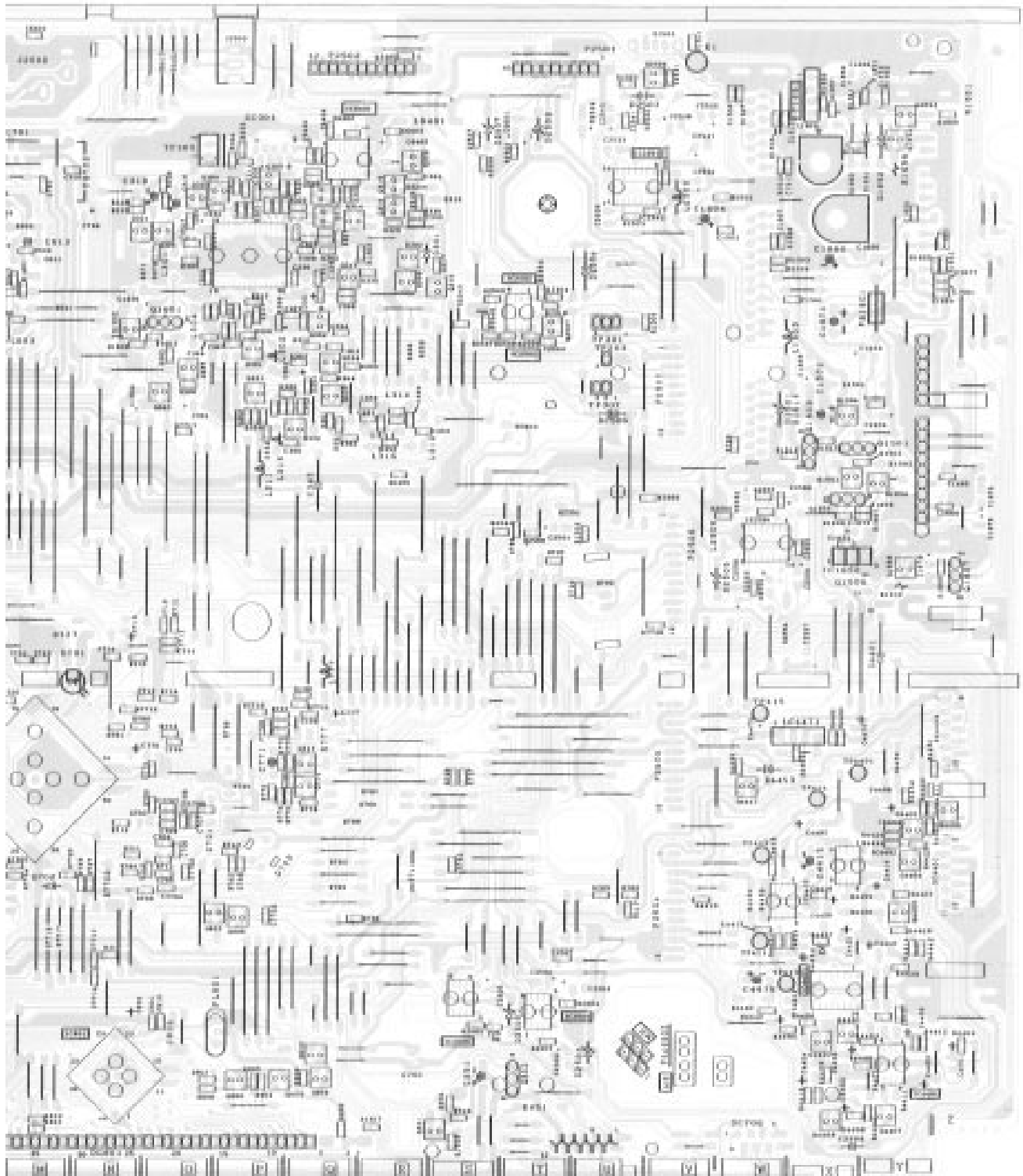


7	8	9	10	11	12	13
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A

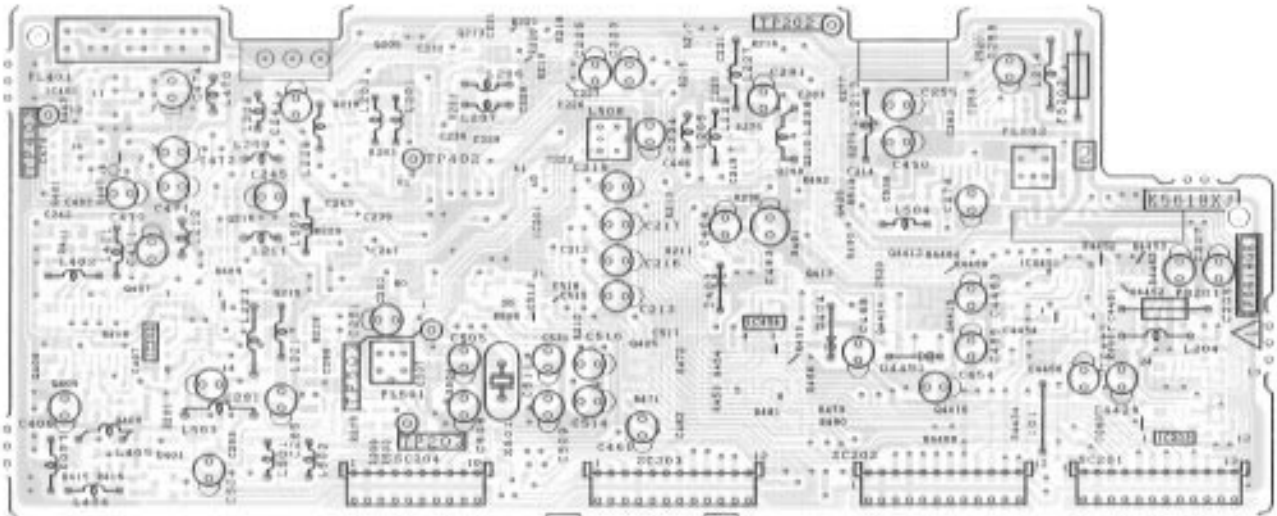




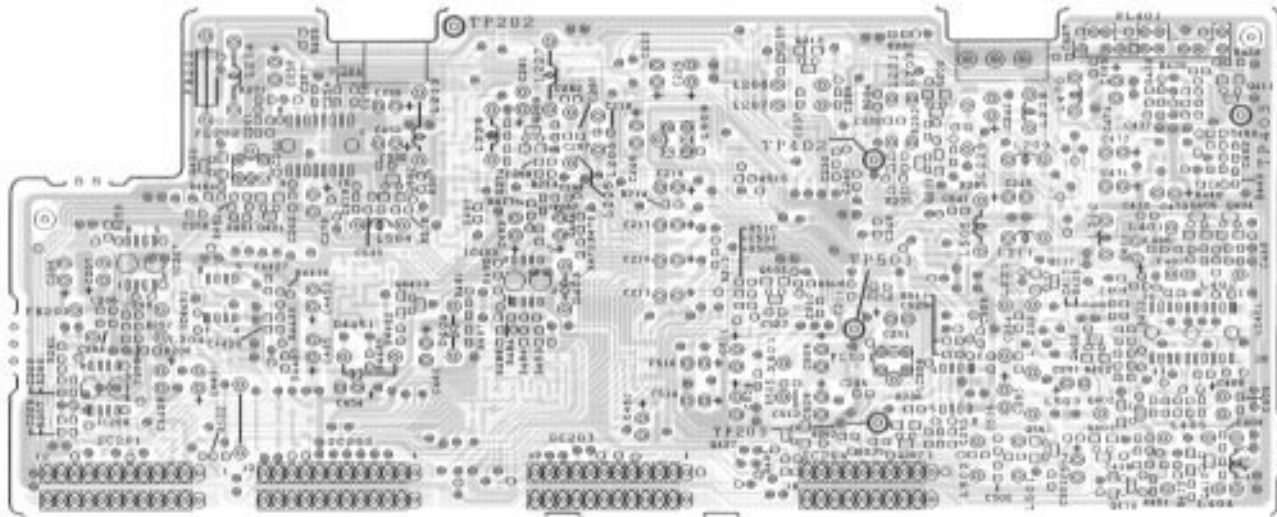


7	8	9	10	11	12	13
---	---	---	----	----	----	----

Y/C PWB SIDE A

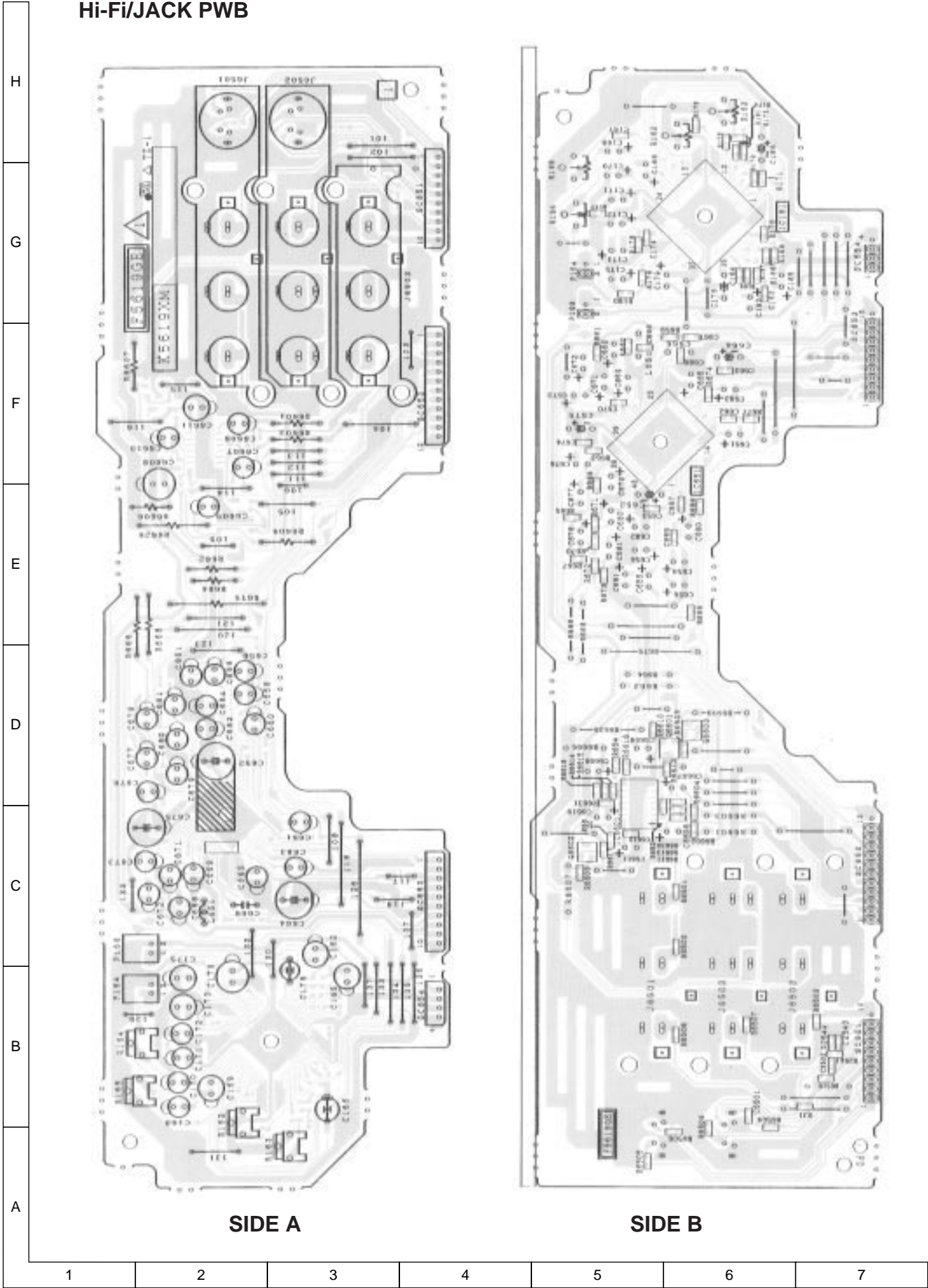


Y/C PWB SIDE B



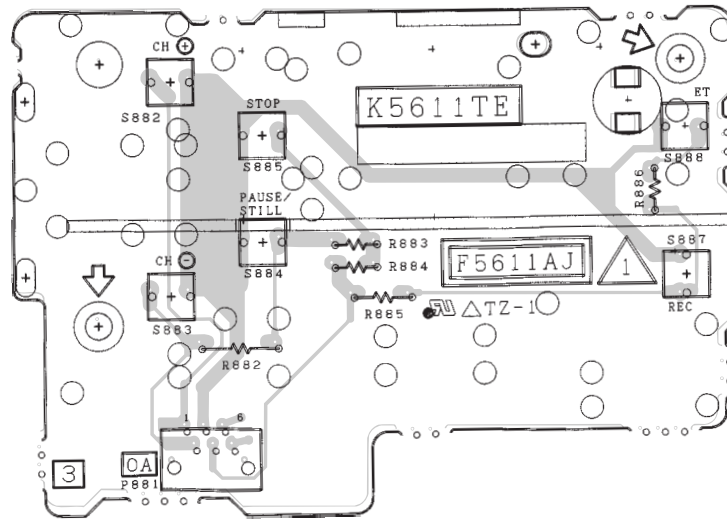


Hi-Fi/JACK PWB

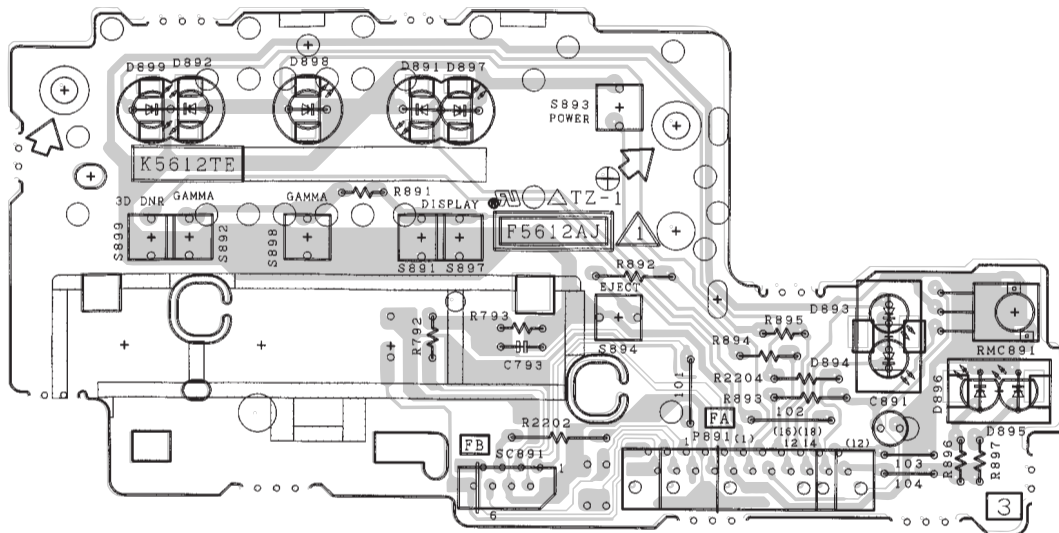




## OPERATION PWB

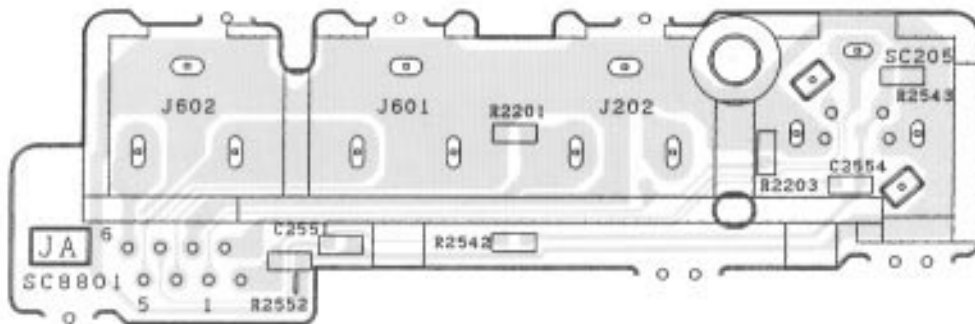


## FRONT A/V PWB



7	8	9	10	11	12	13
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**JACK PWB SIDE B**



## 10. PARTS LIST PARTS REPLACEMENT

Many electrical and mechanical parts in video cassette recorder have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "△" and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

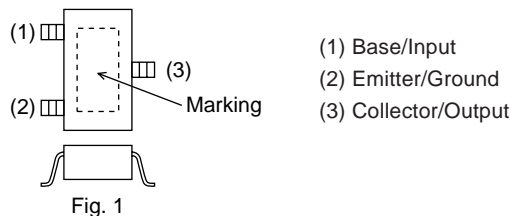
### "HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- |                        |                       |
|------------------------|-----------------------|
| <b>1. MODEL NUMBER</b> | <b>2. REF. NO.</b>    |
| <b>3. PART NO.</b>     | <b>4. DESCRIPTION</b> |

in **USA**: Contact your nearest SHARP Parts Distributor.  
For location of SHARP Parts Distributor,  
Please call Toll-Free; 1-800-BE-SHARP

## HOW TO IDENTIFY CHIP TRANSISTORS AND DIODES BY ITS MARKING



Package	Marking	Parts No.
Fig. 1	FQ	VS2SA1037KQ-1
Fig. 1	BQ	VS2SC2412KQ-1
Fig. 1	16	VSDTA144EK/-1
Fig. 1	15	VSDTA124EK/-1
Fig. 1	25	VSDTC124EK/-1

MARK ★: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

DUNTK5611TEV1	- Operation Unit	—
DUNTK5612TEVA	- Front AV Unit	—
DUNTK5617TEV5	- Main Unit	—
DUNTK5619TEV3	- Hi-Fi/Jack Unit	—
DUNTK5659TEV2	- Jack Unit	—
DUNTK5729TE6A	- CNR Unit	—
DUNTK5742TE6A	- Y/C Unit	—

## LISTE DES PIECES CHANGE DES PIECES

De nombreuses pièces électriques et mécaniques de magnétoscopes présentent des caractéristiques particulières de sécurité.

Ces caractéristiques ne sont pas toujours évidentes à l'inspection visuelle et la protection qu'elles assurent ne peut pas toujours être obtenue par des pièces de rechange étalonnées à un régime de tension, une puissance, etc. supérieures. Les pièces de rechange qui présentent ces caractéristiques spéciales de sécurité, sont identifiées dans ce manuel: les pièces électriques qui présentent ces particularités, sont repérées par la marque "△" et sont hachurées dans les listes de pièces et dans les diagrammes schématiques.

La substitution d'une pièce de rechange par une autre qui ne présente pas les mêmes caractéristiques de sécurité que la pièce recommandée par l'usine et repérée dans ce manuel de service, peut provoquer une électrocution, un incendie ou tout autre sinistre.

### "COMMENT COMMANDER LES PIECES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivants.

- |                            |                       |
|----------------------------|-----------------------|
| <b>1. NUMERO DU MODELE</b> | <b>2. NO. DEREF</b>   |
| <b>3. NO. DE PIECE</b>     | <b>4. DESCRIPTION</b> |

in **CANADA**: Contact SHARP Electronics of Canada Limited  
Phone (416) 890-2100.

★ MARQUE: SECTION LIVRAISON DES PIECES DE RECHANGE

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## INFRARED REMOTE CONTROL UNIT

RRMCG1190AJSA	V	Infrared Remote Control	AY
95J251248A	V	Battery Cover, Infrared Remote Control	—

## DUNTK5617TEV5 Main Unit

### TUNER

**NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.**

TU1501	VTUATMDH2-01A	V	Tuner	BL
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### INTEGRATED CIRCUITS

IC301	VHiAN3336SB-1	V	AN3336SB	AP
IC601	VHiBA7795LS-1	V	BA7795LS	AG
IC701	RH-iX1563GEZZ	J	I.C.	BA
IC702	VHiPST600K/-1	V	IC-PST600K-2	AE
IC705	VHiBA6955N/-1	V	BA6955N	AF
IC710	VHiBR2402E2-1	V	BR24C02F	AG
IC801	VHiMN12510F-1	V	MN12510F	AM
IC902	VHiKIA431/-1	V	KIA431	AE
IC903	VHiSTRF6632-1	V	STR-F6632	AN
IC904	VHiKA7809Pi-1	V	KiA7809Pi	AE
IC1652	VHiKA7812Pi-1	V	KiA7812Pi	AE
IC2501	VHiMM1140XF-1	V	MM1140XFF	AH
IC2503	VHiMM1196XF-1	V	MM1196XFBE	AG
IC2505	VHiMM1113XF1E	V	MM1113XFBE	AE
IC2506	VHiMM1113XF1E	V	MM1113XFBE	AE
IC4471	VHiPQ30RV11-1	V	PQ30RV11	AF
IC6401	VHiTA1249F/-1	V	TA1249F(EL)	AG

Ref. No.	Part No.	★	Description	Code
<b>DUNTK5617TEV5</b>				
<b>Main Unit (Continued)</b>				
<b>TRANSISTORS</b>				
Q301	VSUN2213///-1	V	UN2213	AA
Q302	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q303	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q304	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q305	VSUN2213///-1	V	UN2213	AA
Q306	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q307	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q308	VSUN2213///-1	V	UN2213	AA
Q314	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q315	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q316	VSUN2213///-1	V	UN2213	AA
Q317	VSUN2213///-1	V	UN2213	AA
Q318	VSUN2213///-1	V	UN2213	AA
Q319	VSUN2213///-1	V	UN2213	AA
Q320	VS2SD1306-E1E	V	2SD1306-E	AD
Q321	VS2SD1306-E1E	V	2SD1306-E	AD
Q331	VSUN2213///-1	V	UN2213	AA
Q332	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q333	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q334	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q602	VS2SA1271-Y-1	V	2SA1271-Y	AB
Q603	VS2SC3203Y-1	V	2SC3203	AB
Q604	VSUN2212///-1	V	UN2212	AA
Q704	VS2SA1271-Y-1	V	2SA1271-Y	AB
Q705	VSUN2211///-1	V	UN2211	AA
Q711	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q715	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q804	VSUN2111///-1	V	UN2111	AA
Q805	VSUN2213///-1	V	UN2213	AA
Q806	VSUN2111///-1	V	UN2111	AA
Q807	VSUN2213///-1	V	UN2213	AA
Q853	VS2SD468-AC-1	V	2SD468-AC	AC
Q910	VS2SA1013//1E	V	2SA1013	AD
Q921	VS2SB1117KU1E	V	2SB1117	AE
Q922	VSDTC114ES/-1	V	DTC114ES	AB
Q923	VS2SB1117KU1E	V	2SB1117KU	AE
Q925	VS2SB1117KU1E	V	2SB1117KU	AE
Q926	VSDTC114ES/-1	V	DTC114ES	AB
Q951	VS2SA1271-Y-1	V	2SA1271-Y	AB
Q952	VSUN2212///-1	V	UN2212	AA
Q955	VS2SB1117KU1E	V	2SB1117KU	AE
Q956	VSUN2212///-1	V	UN2212	AA
Q957	VS2SB1117KU1E	V	2SB1117KU	AE
Q958	VSUN2212///-1	V	UN2212	AA
Q965	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q966	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q1501	VS2SB1117KU1E	V	2SB1117KU	AE
Q1502	VSUN2212///-1	V	UN2212	AA
Q1503	VS2SA1013//1E	V	2SA1013	AD
Q1504	VSUN2212///-1	V	UN2212	AA
Q1601	VS2SA1271-Y-1	V	2SA1271-Y	AB
Q1602	VSUN2212///-1	V	UN2212	AA
Q1655	VS2SA1271-Y-1	V	2SA1271-Y	AB
Q1656	VSUN2213///-1	V	UN2213	AA
Q4417	VSUN2113///-1	V	UN2113	AA
<b>DIODES</b>				
DG801	VVK20U2610B-1	V	Display	AY
D301	VHD1SS119//1	V	Diode	AB
D302	VHD1S2837//1E	V	Diode	AC
D701	RH-PX0270GEZZ	J	Photodiode	AC
D702	RH-DX0475CEZZ	V	Diode	AB
D706	RH-PX0252GEZZ	J	GP1S563	AF
D707	RH-PX0252GEZZ	J	GP1S563	AF
D708	RH-PX0253GEZZ	J	GP1S94	AF
D709	RH-PX0253GEZZ	J	GP1S94	AF
D710	RH-DX0475CEZZ	V	Diode	AB
D721	VHD1SS119//1	V	Diode	AB
D901	VHD10ELS4//1	V	Diode	AD

Ref. No.	Part No.	★	Description	Code
△ D902	VHDAP01C///-1	V	Diode	AC
D903	RH-DX0475CEZZ	V	Diode	AB
△ D906	VHD15DF1FC/1E	V	Diode	AD
△ D907	VHD10ELS4//1	V	Diode	AD
△ D908	RH-DX0456CEZZ	V	Diode	AF
△ D909	VHD10ELS4//1	V	Diode	AD
D910	VHD10ELS4//1	V	Diode	AD
△ D912	VHD10ELS4//1	V	Diode	AD
D913	VHD10ELS4//1	V	Diode	AD
△ D918	VHD15DF1FC/1E	V	Diode	AD
D919	RH-EX0667GEZZ	J	Zener Diode	AA
△ D921	RH-DX0083GEZZ	J	Diode	AC
△ D926	VHD10ELS4//1	V	Diode	AD
△ D927	VHD10ELS4//1	V	Diode	AD
D928	VHD1SS119//1	V	Diode	AB
D952	RH-EX0601GEZZ	J	Zener Diode	AA
D957	VHD1S40///-1	V	Diode	AF
D961	VHDRL1N4004-1	V	Diode	AD
D962	VHDRL1N4004-1	V	Diode	AD
D963	VHDRL1N4004-1	V	Diode	AD
D964	VHDRL1N4004-1	V	Diode	AD
D965	VHDRL1N4004-1	V	Diode	AD
D966	VHDRL1N4004-1	V	Diode	AD
D967	VHDRL1N4004-1	V	Diode	AD
D1501	RH-EX0676GEZZ	J	Zener Diode	AA
D2501	RH-EX0634GEZZ	J	Zener Diode	AA
D2502	RH-EX0634GEZZ	J	Zener Diode	AA
D2505	RH-EX0634GEZZ	J	Zener Diode	AA
D2506	RH-EX0634GEZZ	J	Zener Diode	AA
D2507	RH-EX0634GEZZ	J	Zener Diode	AA
D2508	RH-EX0634GEZZ	J	Zener Diode	AA
D4401	VHD1SS119//1	V	Diode	AB
D4453	VHD1SS119//1	V	Diode	AB
D6401	VHD1SS119//1	V	Diode	AB
△ IC901	RH-FX0009GEZZ	J	TCET1107	AD
Q701	RH-PX0233GEZZ	J	PT493FL2	AD
Q702	RH-PX0233GEZZ	J	PT493FL2	AD
<b>CRYSTALS</b>				
X701	RCRSB0228GEZZ	J	Crystal	AF
X702	RCRSB0138GEZZ	J	Crystal	AD
<b>FILTER</b>				
FL801	RFILC0091GEZZ	J	Filter	AD
<b>COILS</b>				
L301	VP-MK101K0000	V	100μH	AB
L302	VP-MK101K0000	V	100μH	AB
L304	VP-XF181K0000	V	180μH	AB
L311	VP-DF221K0000	V	220μH	AB
L312	VP-XF220K0000	V	22μH	AB
L313	VP-XF680K0000	V	68μH	AB
L314	VP-MK271K0000	V	270μH	AB
L315	VP-MK271K0000	V	270μH	AB
L316	VP-XF8R2K0000	V	8.2μH	AB
L601	VPADK822J0000	V	8200μH	AC
L602	VP-DF221K0000	V	220μH	AB
L603	VPADK153J0000	V	15mH	AC
L777	VP-DF101K0000	V	100μH	AB
L851	VP-DF221K0000	V	220μH	AB
△ L901	RCILF0297CEZZ	V	Coil	AG
△ L902	RCILP0173CEZZ	V	Coil	AE
△ L903	RCILP0173CEZZ	V	Coil	AE
L1501	VP-CF101K0000	V	100μH	AB
L1503	VP-DF101K0000	V	100μH	AB
L2505	VP-DF101K0000	V	100μH	AB
L2506	VP-DF101K0000	V	100μH	AB
L6401	VP-DF101K0000	V	100μH	AB
<b>TRANSFORMERS</b>				
T601	RTRNH0082GEZZ	J	OSC. Transformer	AF
△ T901	RTRNZ0098GEZZ	J	Transformer	AT



Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>DUNTK5617TEV5</b>									
<b>Main Unit (Continued)</b>									
<b>CONTROL</b>									
R141	RVR-M4334GEZZ	J	10k(B), S-IF Adj.	AB	C625	VCKYCY1HB221K	V	220p 50V Ceramic	AA
<b>CAPACITORS</b>					C626	VCKYCY1CB104K	V	0.1 16V Ceramic	AB
C161	VCEA9A1CW106M	V	10 16V Electrolytic	AB	C627	VCKYCY1EB183K	V	0.018 25V Ceramic	AA
C301	VCKYCY1HB102K	V	1000p 50V Ceramic	AA	C628	VCKYCY1EB183K	V	0.018 25V Ceramic	AA
C302	VCKYCY1HB102K	V	1000p 50V Ceramic	AA	C629	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C303	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C630	VCKYCY1HB332K	V	3300p 50V Ceramic	AA
C305	VCKYCY1EB223K	V	0.022 25V Ceramic	AA	C631	VCQYWA1HA471J	V	470p 50V Mylar	AA
C306	VCKYCY1EB223K	V	0.022 25V Ceramic	AA	C701	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C308	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C703	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C309	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C704	VCKYCY1CF224Z	V	0.22 16V Ceramic	AA
C311	VCKYCY1EB223K	V	0.022 25V Ceramic	AA	C705	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C312	VCKYCY1EB223K	V	0.022 25V Ceramic	AA	C706	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C313	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C707	VCCCCY1HH120J	V	12p 50V Ceramic	AA
C316	RC-EZ0435GEZZ	J	1 10V Electrolytic	AB	C708	VCCCCY1HH150J	V	15p 50V Ceramic	AA
C317	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C709	VCCCCY1HH180J	V	18p 50V Ceramic	AA
C318	RC-EZ0435GEZZ	J	1 10V Electrolytic	AB	C710	VCCCCY1HH180J	V	18p 50V Ceramic	AA
C320	VCEA9A1CW476M	V	47 16V Electrolytic	AB	C711	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C321	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C712	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C322	VCCCCY1HH101J	V	100p 50V Ceramic	AA	C713	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C323	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C714	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C324	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C715	VCEA9M0JW226M	V	22 6.3V Electrolytic	AB
C325	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C717	VCKYCY1HB221K	V	220p 50V Ceramic	AA
C326	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C718	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C327	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C719	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C328	VCEA9A1HW105M	V	1 50V Electrolytic	AB	C722	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C329	VCCCCY1HH101J	V	100p 50V Ceramic	AA	C724	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C330	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C725	VCKYD41CY103N	V	0.01 16V Ceramic	AA
C331	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA	C726	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C332	VCEA9M0JW227M	V	220 6.3V Electrolytic	AB	C727	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C333	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C729	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C334	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C730	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C335	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C731	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C336	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C736	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C338	VCCCCY1HH331J	V	330p 50V Ceramic	AA	C737	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C339	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C738	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C340	VCKYCY1HB472K	V	4700p 50V Ceramic	AA	C739	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C341	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C740	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C343	VCKYCY1CB104K	V	0.1 16V Ceramic	AB	C743	VCKYCY1CF224Z	V	0.22 16V Ceramic	AA
C344	VCCCCY1HH331J	V	330p 50V Ceramic	AA	C744	VCEA2A0JW477M	V	470 6.3V Electrolytic	AB
C345	VCKYD41HB102K	V	1000p 50V Ceramic	AA	C745	RC-EZ0425GEZZ	J	0.47F 50V Electrolytic	AE
C351	VCEA9M1CW476M	V	47 16V Electrolytic	AB	C747	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C352	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C750	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C353	VCCCCY1HH390J	V	39p 50V Ceramic	AA	C752	VCEA2A1EW337M	V	330 25V Electrolytic	AD
C354	VCCCCY1HH680J	V	68p 50V Ceramic	AA	C753	VCCCCY1HH680J	V	68p 50V Ceramic	AA
C355	VCCCCY1HH271J	V	270p 50V Ceramic	AA	C755	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C356	VCCCCY1HH121J	V	120p 50V Ceramic	AA	C756	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C357	VCCCCY1HH470J	V	47p 50V Ceramic	AA	C770	VCCCCY1HH101J	V	100p 50V Ceramic	AA
C358	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C771	VCE9EA1HW105M	V	1 50V Elect.(N.P)	AC
C360	VCCCCY1HH271J	V	270p 50V Ceramic	AA	C774	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C361	VCCCCY1HH680J	V	68p 50V Ceramic	AA	C775	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C362	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C776	VCKYCY0JF105Z	V	1 6.3V Ceramic	AB
C363	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C777	VCEA9M1CW476M	V	47 16V Electrolytic	AB
C364	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	C782	VCCCCY1HH330J	V	33p 50V Ceramic	AA
C369	RC-EZ0459CEZZ	V	10 16V Electrolytic	AE	C795	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C601	VCKYCY1HB152K	V	1500p 50V Ceramic	AA	C796	RC-EZ0460GEZZ	J	47 6.3V Electrolytic	AD
C603	VCEA9M1HW335M	V	3.3 50V Electrolytic	AB	C798	VCKYD41CY103N	V	0.01 16V Ceramic	AA
C604	VCEA9M0JW226M	V	22 6.3V Electrolytic	AB	C799	VCEAEM0JW226M	V	22 6.3V Electrolytic	AB
C605	VCFYSA1HB123J	V	0.012 50V M.Polypro	AA	C801	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C606	VCKYCY1HB102K	V	1000p 50V Ceramic	AA	C802	VCEA9M0JW227M	V	220 6.3V Electrolytic	AB
C607	VCEA9M1CW476M	V	47 16V Electrolytic	AB	C807	VCCCCY1HH330J	V	33p 50V Ceramic	AA
C609	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA	C808	VCCCCY1HH101J	V	100p 50V Ceramic	AA
C610	VCEA9M1CW226M	V	22 16V Electrolytic	AB	C809	VCCCCY1HH101J	V	100p 50V Ceramic	AA
C611	VCEA9M1CW106M	V	10 16V Electrolytic	AB	C810	VCCCCY1HH151J	V	150p 50V Ceramic	AA
C613	VCFYSA1HB333J	V	0.033 50V M.Polypro	AE	C851	VCEAGA1CW227M	V	220 16V Electrolytic	AC
C621	VCEA9M1CW476M	V	47 16V Electrolytic	AB	△ C901	RC-FZ063SGEZZ	J	0.1 125V M.Polypro	AE
C622	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	△ C902	RC-FZ063SGEZZ	J	0.1 125V M.Polypro	AE
C623	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	△ C903	RC-KZ0092GEZZ	J	3300p 250V Ceramic	AC
C624	VCQPYA2AA562J	V	5600p 100V Mylar	AC	△ C904	RC-EZ0463GEZZ	J	100 200V Electrolytic	AG
					△ C905	RC-KZ0029CEZZ	V	0.01 500V Ceramic	AC
					△ C906	RC-KZ0077GEZZ	J	220p 2kV Ceramic	AC
					C907	VCQYWA1HA471J	V	470p 50V Mylar	AA
					C908	VCEAEM1EW476M	V	47 25V Electrolytic	AC
					C910	VCQYTA1HM222J	V	2200p 50V Mylar	AA
					△ C912	VCEAGH1EW228M	V	2200 25V Electrolytic	AE
					C913	RC-EZ0353CEZZ	V	330 25V Electrolytic	AC

Ref. No.	Part No.	★	Description	Code
<b>DUNTK5617TEV5</b>				
<b>Main Unit (Continued)</b>				
⚠ C914	VCEA9M1HW226M	V	22 50V Electrolytic	AB
⚠ C916	RC-EZ0438GEZZ	J	2200 100V Electrolytic	AF
⚠ C917	RC-EZ0438GEZZ	J	2200 100V Electrolytic	AF
C918	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
⚠ C919	VCEA9M1CW107M	V	100 16V Electrolytic	AB
⚠ C920	VCEA0A1JW336M	V	33 63V Electrolytic	AC
⚠ C921	VCEA0A1EW108M	V	1000 25V Electrolytic	AD
⚠ C922	VCEA0A1VW477M	V	470 35V Electrolytic	AB
⚠ C923	VCQYTA1HM103J	V	0.01 50V Mylar	AA
⚠ C925	RC-KZ0083GEZZ	J	100p AC125V Ceramic	AF
C926	VCEA9M1HW226M	V	22 50V Electrolytic	AB
C927	VCQYTA1HM333J	V	0.033 50V Mylar	AA
C928	VCQYTA1HM102J	V	1000p 50V Mylar	AA
⚠ C930	RC-KZ0114GEZZ	J	680p 1kV Ceramic	AC
⚠ C935	VCKYPA2HB472K	V	4700p 500V Ceramic	AB
⚠ C936	RC-EZ0479CEZZ	V	4.7 25V Electrolytic	AF
C952	VCKYCY1AF105Z	V	1 10V Ceramic	AC
C953	RC-EZ0460GEZZ	J	47 6.3V Electrolytic	AD
C956	VCEA9M0JW226M	V	22 6.3V Electrolytic	AB
C957	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C958	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C1501	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C1502	VCEA2A0JW108M	V	1000 6.3V Electrolytic	AB
C1503	VCKYCY1HF333Z	V	0.033 50V Ceramic	AA
C1504	VCEAGA1HW476M	V	47 50V Electrolytic	AB
C1505	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C1506	VCCCCY1HH101J	V	100p 50V Ceramic	AA
C1507	VCCCCY1HH101J	V	100p 50V Ceramic	AA
C1508	VCKYCY1HB562K	V	5600p 50V Ceramic	AA
C1509	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C1511	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C1512	VCCCCY1HW221J	V	220p 50V Ceramic	AA
C1513	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C1601	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
C1671	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C1672	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C1673	VCEA9M1EW476M	V	47 25V Electrolytic	AC
C2501	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C2502	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C2503	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C2504	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C2505	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C2506	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C2507	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C2508	VCCSD41HL470J	V	47p 50V Ceramic	AA
C2527	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C2533	VCE9EM1AW106M	V	10 10V Elect.(N.P)	AB
C2534	VCEA9M0JW107M	V	100 6.3V Electrolytic	AB
C2535	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C2536	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C2537	VCEA9M0JW107M	V	100 6.3V Electrolytic	AB
C2538	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C2539	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C2540	VCEA9M0JW107M	V	100 6.3V Electrolytic	AB
C2541	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C2542	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C2555	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C2556	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C2557	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C2558	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C2559	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C2561	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C2562	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C4475	VCEA9M1HW334M	V	0.33 50V Electrolytic	AB
C4476	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C6401	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C6402	VCEA9M1CW476M	V	47 16V Electrolytic	AB
C6403	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C6404	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C6405	VCKYCY1EB103K	V	0.01 25V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
C6406	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C6407	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C6420	VCCCCY1HH101J	V	100p 50V Ceramic	AA
C7705	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C7707	VCCCCY1HH3R0C	V	3p 50V Ceramic	AA
C7711	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C7712	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C7713	VCKYCY1HB102K	V	1000p 50V Ceramic	AA

**RESISTORS**

R110	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA
R111	VRD-RA2BE153J	V	15k 1/8W Carbon	AA
R301	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R302	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R303	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R304	VRS-CY1JF391J	V	390 1/16W Metal Oxide	AA
R305	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R306	VRS-CY1JF391J	V	390 1/16W Metal Oxide	AA
R307	VRS-CY1JF561J	V	560 1/16W Metal Oxide	AA
R308	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R309	VRS-CY1JF392J	V	3.9k 1/16W Metal Oxide	AA
R310	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R311	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
R312	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R313	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R314	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R315	VRS-CY1JF561J	V	560 1/16W Metal Oxide	AA
R316	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R317	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R318	VRS-CY1JF561J	V	560 1/16W Metal Oxide	AA
R319	VRD-RA2BE682J	V	6.8k 1/8W Carbon	AA
R320	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA
R321	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R322	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA
R324	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R326	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R327	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R328	VRS-CY1JF331J	V	330 1/16W Metal Oxide	AA
R329	VRD-RA2BE223J	V	22k 1/8W Carbon	AA
R330	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R332	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R334	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
R335	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R336	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R351	VRS-CY1JF221J	V	220 1/16W Metal Oxide	AA
R352	VRS-CY1JF681J	V	680 1/16W Metal Oxide	AA
R353	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R354	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R355	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R356	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R357	VRS-CY1JF271J	V	270 1/16W Metal Oxide	AA
R358	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R359	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R360	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R361	VRS-CY1JF224J	V	220k 1/16W Metal Oxide	AA
R362	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R363	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R364	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R366	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
R367	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R371	VRD-RA2BE222J	V	2.2k 1/8W Carbon	AA
R372	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R602	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R603	VRS-CY1JF271J	V	270 1/16W Metal Oxide	AA
R604	VRS-CY1JF274J	V	270k 1/16W Metal Oxide	AA
R605	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R606	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R607	VRS-CY1JF272J	V	2.7k 1/16W Metal Oxide	AA
R608	VRS-CY1JF562J	V	5.6k 1/16W Metal Oxide	AA
R609	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA
R610	VRS-CY1JF105J	V	1M 1/16W Metal Oxide	AA
R615	VRS-CY1JF823J	V	82k 1/16W Metal Oxide	AA
R616	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA
R617	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA



Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>DUNTK5617TEV5</b>									
<b>Main Unit (Continued)</b>									
R618	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA	R786	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R620	VRD-RA2BE181J	V	180 1/8W Carbon	AA	R787	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R629	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA	R788	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R631	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA	R789	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R632	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA	R790	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R633	VRD-RA2EE4R7J	V	4.7 1/4W Carbon	AA	R791	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R635	VRD-RA2BE273J	V	27k 1/8W Carbon	AA	R794	VRS-CY1JF123J	V	12k 1/16W Metal Oxide	AA
R638	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA	R795	VRS-CY1JF563J	V	56k 1/16W Metal Oxide	AA
R640	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA	R797	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R641	VRD-RA2BE683J	V	68k 1/8W Carbon	AA	R798	VRD-RA2BE223J	V	22k 1/8W Carbon	AA
R642	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA	R801	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R643	VRS-CY1JF561J	V	560 1/16W Metal Oxide	AA	R802	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R644	VRS-CY1JF151J	V	150 1/16W Metal Oxide	AA	R805	VRS-CY1JF563J	V	56k 1/16W Metal Oxide	AA
R646	VRG-SC2EB2R2J	V	2.2 1/4W Fuse Resistor	AC	R808	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R701	VRS-CY1JF183J	V	18k 1/16W Metal Oxide	AA	R810	VRS-CY1JF123J	V	12k 1/16W Metal Oxide	AA
R703	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	R812	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R704	VRD-RA2BE471J	V	470 1/8W Carbon	AA	R813	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA
R705	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	R814	VRS-CY1JF272J	V	2.7k 1/16W Metal Oxide	AA
R706	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA	R818	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R707	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA	R819	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R708	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA	R820	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R709	VRS-CY1JF331J	V	330 1/16W Metal Oxide	AA	R821	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA
R710	VRS-CY1JF224J	V	220k 1/16W Metal Oxide	AA	R822	VRS-CY1JF272J	V	2.7k 1/16W Metal Oxide	AA
R711	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA	R823	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R712	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA	R824	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R713	VRS-CY1JF564J	V	560k 1/16W Metal Oxide	AA	R825	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R714	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA	R826	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R715	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA	R829	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R716	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA	R830	VRD-RM2HD270J	V	27 1/2W Carbon	AA
R717	VRS-CY1JF681J	V	680 1/16W Metal Oxide	AA	R851	VRD-RM2HD100J	V	10 1/2W Carbon	AA
R718	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA	R901	VRC-UB2HG275K	V	2.7M 1/2W Solid	AF
R719	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	△ R904	VRS-VV3DB683J	V	68k 2W Metal Oxide	AA
R720	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA	R906	VRD-RM2HD681J	V	680 1/2W Carbon	AA
R722	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	R907	VRN-VV3ABR39J	V	0.39 1W Mwtal Film	AA
R724	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA	R908	VRD-RM2HD270J	V	27 1/2W Carbon	AA
R727	VRD-RA2EE151J	V	150 1/4W Carbon	AA	R912	VRD-RA2BE182J	V	1.8k 1/8W Carbon	AA
R728	VRD-RA2BE222J	V	2.2k 1/8W Carbon	AA	R913	VRD-RA2BE332J	V	3.3k 1/8W Carbon	AA
R732	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA	△ R914	VRD-RM2HD154J	V	150k 1/2W Carbon	AA
R734	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA	R915	VRG-SC2EB2R2J	V	2.2 1/4W Fuse Resistor	AC
R735	VRS-CY1JF393J	V	39k 1/16W Metal Oxide	AA	R916	VRD-RA2BE822J	V	8.2k 1/8W Carbon	AA
R736	VRS-CY1JF183J	V	18k 1/16W Metal Oxide	AA	R925	VRD-RA2BE152J	V	1.5k 1/8W Carbon	AA
R737	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	R926	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R738	VRD-RA2BE104J	V	100k 1/8W Carbon	AA	R927	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R739	VRD-RA2BE271J	V	270 1/8W Carbon	AA	R928	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R740	VRD-RA2BE104J	V	100k 1/8W Carbon	AA	R929	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R741	VRD-RA2BE271J	V	270 1/8W Carbon	AA	R935	VRD-RA2BE121J	V	120 1/8W Carbon	AA
R742	VRS-CY1JF154J	V	150k 1/16W Metal Oxide	AA	R938	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R743	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA	R939	VRD-RM2HD101J	V	100 1/2W Carbon	AA
R744	VRS-CY1JF154J	V	150k 1/16W Metal Oxide	AA	R940	VRD-RA2BE182J	V	1.8k 1/8W Carbon	AA
R745	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA	R942	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R747	VRD-RA2BE103J	V	10k 1/8W Carbon	AA	R943	VRD-RM2HD681J	V	680 1/2W Carbon	AA
R748	VRD-RA2BE103J	V	10k 1/8W Carbon	AA	R950	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R749	VRD-RA2EE680J	V	68 1/4W Carbon	AA	R951	VRD-RM2HD681J	V	680 1/2W Carbon	AA
R751	VRD-RA2BE123J	V	12k 1/8W Carbon	AA	R952	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R752	VRS-CY1JF123J	V	12k 1/16W Metal Oxide	AA	R954	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
R753	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	R955	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R754	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA	R956	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R758	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA	R957	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R759	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA	R958	VRD-RM2HD182J	V	1.8k 1/2W Carbon	AA
R760	VRS-CY1JF1R0J	V	1 1/16W Metal Oxide	AA	R959	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R761	VRS-CY1JF1R0J	V	1 1/16W Metal Oxide	AA	R960	VRN-VV3DB3R3J	V	3.3 2W Metal Film	AB
R770	VRS-CY1JF272J	V	2.7k 1/16W Metal Oxide	AA	R961	VRD-RM2HD182J	V	1.8k 1/2W Carbon	AA
R773	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA	R962	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R774	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA	R965	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R775	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA	R966	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R777	VRD-RA2EE331J	V	330 1/4W Carbon	AA	R967	VRD-RA2BE223J	V	22k 1/8W Carbon	AA
R781	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA	R1501	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R783	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	R1502	VRD-RM2HD471J	V	470 1/2W Carbon	AA
R784	VRS-CY1JF331J	V	330 1/16W Metal Oxide	AA	R1503	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R785	VRD-RA2BE102J	V	1k 1/8W Carbon	AA	R1504	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
					R1506	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA
					R1507	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
					R1510	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA
					R1515	VRD-RM2HD102J	V	1k 1/2W Carbon	AA
					R1516	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
<b>DUNTK5617TEV5</b>				
<b>Main Unit (Continued)</b>				
R1517	VRS-CY1JF393J	V	39k 1/16W Metal Oxide	AA
R1601	VRS-CY1JF331J	V	330 1/16W Metal Oxide	AA
R1602	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R1603	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R1665	VRS-CY1JF562J	V	5.6k 1/16W Metal Oxide	AA
R1666	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
R1667	VRS-CY1JF562J	V	5.6k 1/16W Metal Oxide	AA
R2502	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R2503	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R2504	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R2505	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R2506	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R2523	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R2534	VRS-CY1JF6R8J	V	6.8 1/16W Metal Oxide	AA
R2551	VRD-RA2BE122J	V	1.2k 1/8W Carbon	AA
R2553	VRS-CY1JF560J	V	56 1/16W Metal Oxide	AA
R2554	VRD-RA2BE560J	V	56 1/8W Carbon	AA
R2556	VRS-CY1JF560J	V	56 1/16W Metal Oxide	AA
R2557	VRS-CY1JF391J	V	390 1/16W Metal Oxide	AA
R4489	VRS-CY1JF152F	V	1.5k 1/16W Metal Oxide	AA
R4490	VRS-CY1JF102F	V	1k 1/16W Metal Oxide	AA
R4491	VRS-CY1JF682F	V	6.8k 1/16W Metal Oxide	AA
R4492	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R6401	VRD-RA2BE222J	V	2.2k 1/8W Carbon	AA
R6405	VRS-CY1JF393J	V	39k 1/16W Metal Oxide	AA
R6410	VRD-RA2BE561J	V	560 1/8W Carbon	AA
R7701	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7702	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7703	VRD-RA2BE331J	V	330 1/8W Carbon	AA
R7704	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R7705	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R7707	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7708	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7709	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R7712	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7713	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R7714	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7715	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7716	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7717	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7718	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7719	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7720	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7721	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7722	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R7723	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7724	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7725	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R7746	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R7756	VRD-RA2BE392J	V	3.9k 1/8W Carbon	AA

**MISCELLANEOUS PARTS**

⚠	ACC901	QACCD3049AJZZ	V	AC Cord	AN
⚠	F901	QFS-A3025CEZZ	V	Fuse, 125V/3A	AD
	FB702	RBLN-0036CEZZ	V	Ferrite Bead	AB
	FB705	RBLN-0077TAZZ	V	Ferrite Bead	AB
⚠	FB901	RBLN-0020CEZZ	V	Ferrite Bead	AB
⚠	FB902	RBLN-0036CEZZ	V	Ferrite Bead	AB
	FB903	RBLN-0020CEZZ	V	Ferrite Bead	AB
⚠	FH901	QFSDH1014CEZZ	V	Fuse Holder	AC
⚠	FH902	QFSDH1013CEZZ	V	Fuse Holder	AC
	P161	QPLGN0347REZZ	V	Plug, 3pin	AA
	P701	QPLGZ0883GEZZ	J	Plug, 8pin (AC)	AD
	P702	QPLGN0247REZZ	V	Plug, 2pin	AA
	P2501	QPLGZ1060GEZZ	J	Plug, 10pin	AC
	P2502	QPLGZ1260GEZZ	J	Plug, 12pin	AE
	P2503	QPLGZ1060GEZZ	J	Plug, 10pin	AC
	P2504	QPLGZ1246GEZZ	J	Plug, 12pin	AC
	P2505	QPLGZ1246GEZZ	J	Plug, 12pin	AC
	P2506	QPLGZ1246GEZZ	J	Plug, 12pin	AC

Ref. No.	Part No.	★	Description	Code
P2507	QPLGZ1046GEZZ	J	Plug, 10pin	AC
P2508	QPLGZ0460GEZZ	J	Plug, 4pin	AC
S701	QSW-F0042AJZZ	V	Rec Tab Switch	AG
S703	QSW-F0003CEZZ	V	Switch	AD
S801	QSW-K0002AJZZ	V	Switch, MENU	AD
S802	QSW-K0002AJZZ	V	Switch, SET	AD
S881	QSW-Z0071GEZZ	J	JOG Switch	AM
S1501	QSW-S0004AJZZ	V	Switch	AF
SC301	QSOCN0911REN1	V	Socket, 9pin (ZA)	AD
SC601	QSOCN0695REZZ	V	Socket, 6pin (AA)	AB
SC602	QSOCZ0293GEZZ	J	Socket, 2pin (AE)	AC
SC701	QSOCN0795REZZ	V	Socket, 7pin (AD)	AC
SC702	QSOCZ0292GEZZ	J	Socket, 2pin (AL)	AC
SC703	QSOCZ1225CEZZ	V	Socket, 12pin (AF)	AD
SC704	QSOCZ0625CEZZ	V	Socket, 6pin (AO)	AC
SC705	QSOCN0506REN1	V	Socket, 5pin (AO)	AC
SC706	QSOCN0804REN1	V	Socket, 8pin (FB)	AB
SC4401	QSOCN1153REZZ	V	Socket, 11pin	AE
SC4402	QSOCN1153REZZ	V	Socket, 11pin	AE
TP301	QPLGN0447REZZ	V	Plug, 4pin	AA
TP302	QPLGN0247REZZ	V	Plug, 2pin	AA
TP305	QPLGN0239REZZ	V	Plug, 2pin	AA
TP307	QPLGN0347REZZ	V	Plug, 3pin	AA
TP415	QLUGP0101AJFW	V	Lug	AB
TP801	QPLGN0262REZZ	V	Plug, 2pin	AB
TP802	QPLGN0262REZZ	V	Plug, 2pin	AB
	QCNW-0311AJZZ	V	Connecting Cord	AE
	QCNW-7899GEZZ	J	Connecting Cord(GND YO) AD	AD

**DUNTK5611TEV1****Operation Unit****RESISTORS**

R882	VRD-RA2BE222J	V	2.2k 1/8W Carbon	AA
R883	VRD-RA2BE332J	V	3.3k 1/8W Carbon	AA
R884	VRD-RA2BE472J	V	4.7k 1/8W Carbon	AA
R885	VRD-RA2BE103J	V	10k 1/8W Carbon	AA

**MISCELLANEOUS PARTS**

P881	QPLGZ0626CEZZ	V	Plug, 6pin(OA)	AF
S881	QSW-Z0071GEZZ	J	JOG Switch	AM
S882	QSW-K0002AJZZ	V	Switch, CH +	AD
S883	QSW-K0002AJZZ	V	Switch, CH -	AD
S884	QSW-K0002AJZZ	V	Switch, PAUSE/STILL A	AD
S885	QSW-K0002AJZZ	V	Switch, STOP A	AD
S887	QSW-K0002AJZZ	V	Switch, REC A	AD

**DUNTK5612TEVA****Front AV Unit****DIODES**

D891	RH-PX0280GEZZ	J	Photodiode	AC
D892	RH-PX0280GEZZ	J	Photodiode	AC
D893	RH-PX0270GEZZ	J	Photodiode	AC
D894	RH-PX0270GEZZ	J	Photodiode	AC
D895	RH-PX0284GEZZ	J	Photodiode	AC
D896	RH-PX0284GEZZ	J	Photodiode	AC

**CAPACITORS**

C891	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
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**RESISTORS**

R891	VRD-RA2BE122J	V	1.2k 1/8W Carbon	AA
R892	VRD-RA2BE122J	V	1.2k 1/8W Carbon	AA
R893	VRD-RA2BE101J	V	100 1/8W Carbon	AB
R895	VRD-RA2BE221J	V	220 1/8W Carbon	AA
R896	VRD-RA2BE121J	V	120 1/8W Carbon	AA
R897	VRD-RA2BE121J	V	120 1/8W Carbon	AA
R898	VRD-RA2BE100J	V	10 1/8W Carbon	AA
R2204	VRD-RA2BE221J	V	220 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>DUNTK5612TEVA</b>					<b>COILS</b>				
<b>Front AV Unit (Continued)</b>					FL202	RCILF0290GEZZ	J	Coil	AF
<b>MISCELLANEOUS PARTS</b>					FL401	RCILF0289GEZZ	J	Coil	AL
P891	QPLGZ1226CEZZ	V	Plug, 12pin (FA)	AD	FL501	RCILIO094GEZZ	J	IF Coil	AF
RMC891	RRMCU0064GEZZ	J	Remote Receiver	AG	L201	VP-XF121K0000	V	120μH	AB
S891	QSW-K0002AJZZ	V	Switch, Auto AV Rec	AD	L203	VP-XF680K0000	V	68μH	AB
S892	QSW-K0002AJZZ	V	Switch, ET	AD	L204	VP-DF101K0000	V	100μH	AB
S893	QSW-K0002AJZZ	V	Switch, Power	AD	L205	VP-MK470K0000	V	47μH	AB
S894	QSW-K0002AJZZ	V	Switch, Eject	AD	L206	VP-XF100K0000	V	10μH	AB
	LHLDP1089AJ00	V	LED Holder	AC	L207	VP-XF560K0000	V	56μH	AB
	LHLDP1179AJZZ	V	LED Holder S-ET	AE	L208	VP-MK221K0000	V	220μH	AB
	LHLDZ2055AJZZ	V	C/B LED Holder	AD	L209	VP-MK102K0000	V	1000μH	AB
<b>DUNTK5742TE6A</b>					L211	VP-MK221K0000	V	220μH	AB
<b>Y/C Unit</b>					L212	VP-MK221K0000	V	220μH	AB
<b>INTEGRATED CIRCUITS</b>					L213	VP-DF101K0000	V	100μH	AB
IC201	VHiJCP0054/-1	V	JCP0054	BA	L214	VP-DF470K0000	V	47μH	AB
IC202	RH-iX1426CEZZ	V	TC74HC04AF	AC	L221	VP-XF470K0000	V	47μH	AB
IC203	VHiM62392FP-1	V	M62392FP	AM	L223	VP-DF470K0000	V	47μH	AB
IC204	VHiTL8848AF-1	V	TL8848AF(EL)	AP	L225	VP-XF270K0000	V	27μH	AB
IC206	VHiCXA1211M-1	V	CXA1211M	AH	L226	VP-XF101K0000	V	100μH	AB
IC207	VHiNJM431E/-1	V	NJM431E-TE1	AF	L227	VP-DF470K0000	V	47μH	AB
IC208	VHiNJM431E/-1	V	NJM431E-TE1	AF	L228	VP-XF220K0000	V	22μH	AB
IC401	VHiVC2076MP-1	V	VC2076MP	AT	L401	VP-XF330K0000	V	33μH	AB
IC404	VHiBA10393F1E	V	BA10393F	AD	L402	VP-XF220K0000	V	22μH	AB
IC410	VHiM52363FP-1	V	M52363FP	AM	L403	VP-XF121K0000	V	120μH	AB
<b>TRANSISTORS</b>					L404	VP-XF221K0000	V	220μH	AB
Q201	VSUN2213///-1	V	UN2213	AA	L405	VP-XF180K0000	V	18μH	AB
Q202	VSUN2213///-1	V	UN2213	AA	L470	VP-MK101K0000	V	100μH	AB
Q204	VSUN2213///-1	V	UN2213	AA	L501	VP-MK471K0000	V	470μH	AB
Q205	VSUN2213///-1	V	UN2213	AA	L502	VP-MK102K0000	V	1000μH	AB
Q207	VS2SA1037KQ-1	V	2SA1037KQ	AA	L503	VP-DF101K0000	V	100μH	AB
Q208	VS2SA1037KQ-1	V	2SA1037KQ	AA	L504	VP-XF470K0000	V	47μH	AB
Q209	VS2SC2412KQ-1	V	2SC2412KQ	AA	L505	VP-XF390K0000	V	39μH	AB
Q210	VS2SC2412KQ-1	V	2SC2412KQ	AA	<b>CAPACITORS</b>				
Q213	VS2SA1037KQ-1	V	2SA1037KQ	AA	C202	VCCCCY1HH470J	V	47p 50V Ceramic	AA
Q215	VSUN2213///-1	V	UN2213	AA	C203	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
Q216	VSUN2213///-1	V	UN2213	AA	C204	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q217	VSUN2213///-1	V	UN2213	AA	C205	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
Q218	VSUN2113///-1	V	UN2213	AA	C206	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q401	VSUN2213///-1	V	UN2213	AA	C207	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
Q402	VSUN2213///-1	V	UN2213	AA	C208	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
Q403	VSUN2213///-1	V	UN2213	AA	C209	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
Q404	VS2SC2412KQ-1	V	2SC2412KQ	AA	C210	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q405	VS2SC2412KQ-1	V	2SC2412KQ	AA	C211	VCCCCY1HH331J	V	330p 50V Ceramic	AA
Q406	VSUN2213///-1	V	UN2213	AA	C212	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q407	VSUN2213///-1	V	UN2213	AA	C213	VCEA9M1HW225M	V	2.2 50V Electrolytic	AB
Q408	VS2SC2412KQ-1	V	2SC2412KQ	AA	C214	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q409	VSUN2213///-1	V	UN2213	AA	C215	VCKYCY1AF105Z	V	1 10V Ceramic	AC
Q410	VS2SC2412KQ-1	V	2SC2412KQ	AA	C216	VCEA9M1CW226M	V	22 16V Electrolytic	AB
Q411	VS2SA1037KQ-1	V	2SA1037KQ	AA	C217	VCEA9M1HW474M	V	0.47 50V Electrolytic	AB
Q412	VS2SC2412KQ-1	V	2SC2412KQ	AA	C218	VCCCCY1HH470J	V	47p 50V Ceramic	AA
Q414	VSUN2213///-1	V	UN2213	AA	C219	VCEA9M1CW226M	V	22 16V Electrolytic	AB
Q421	VS2SC2412KQ-1	V	2SC2412KQ	AA	C220	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q422	VS2SA1037KQ-1	V	2SA1037KQ	AA	C221	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q427	VSUN2212///-1	V	UN2212	AA	C222	VCKYCY1HF473Z	V	0.047 50V Ceramic	AA
Q501	VS2SC2412KQ-1	V	2SC2412KQ	AA	C223	VCEA9M1CW106M	V	10 16V Electrolytic	AB
Q502	VS2SC2412KQ-1	V	2SC2412KQ	AA	C224	VCEA9M1CW106M	V	10 16V Electrolytic	AB
Q505	VS2SA1037KQ-1	V	2SA1037KQ	AA	C225	VCEA9M1CW106M	V	10 16V Electrolytic	AB
Q4416	VSUN2112///-1	V	UN2112	AA	C226	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
<b>DIODES</b>					C227	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
D401	VHD1S2837//1E	V	Diode	AC	C228	VCKYCY1AF105Z	V	1 10V Ceramic	AC
<b>CRYSTAL</b>					C229	VCKYCY1CB104K	V	0.1 16V Ceramic	AB
X501	RCRSB0243GEZZ	J	Crystal	AG	C230	VCKYCY1AF105Z	V	1 10V Ceramic	AC
					C231	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
					C232	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
					C233	VCCCCY1HH120J	V	12p 50V Ceramic	AA
					C234	VCCCCY1HH331J	V	330p 50V Ceramic	AA
					C235	VCCCCY1HH121J	V	120p 50V Ceramic	AA
					C236	VCKYCY1CB104K	V	0.1 16V Ceramic	AB
					C237	VCCCCY1HH220J	V	22p 50V Ceramic	AA
					C238	VCCCCY1HH151J	V	150p 50V Ceramic	AA
					C239	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
					C240	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA



Ref. No.	Part No.	★	Description	Code
<b>DUNTK5742TE6A</b>				
<b>Y/C Unit (Continued)</b>				
C241	VCEA9M0JW476M	V 47	6.3V Electrolytic	AB
C242	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C243	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C244	VCCCCY1HH330J	V 33p	50V Ceramic	AA
C245	VCEA9M0JW476M	V 47	6.3V Electrolytic	AB
C246	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C247	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C249	VCKYCY1EF104Z	V 0.1	25V Ceramic	AA
C250	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C251	VCEA9M0JW476M	V 47	6.3V Electrolytic	AB
C252	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C253	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C254	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C255	VCEA9M1CW226M	V 22	16V Electrolytic	AB
C256	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C257	VCKYCY1AF105Z	V 1	10V Ceramic	AC
C258	VCEA9M1CW226M	V 22	16V Electrolytic	AB
C259	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C260	VCKYCY1HB472K	V 4700p	50V Ceramic	AA
C261	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C262	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C263	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C264	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C265	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C266	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C279	VCEA9M1HW105M	V 1	50V Electrolytic	AB
C280	VCKYCY1EF104Z	V 0.1	25V Ceramic	AA
C281	VCEA9M1CW106M	V 10	16V Electrolytic	AB
C282	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C283	VCCCCY1HH180J	V 18p	50V Ceramic	AA
C284	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C285	VCEA9M0JW476M	V 47	6.3V Electrolytic	AB
C286	VCCCCY1HH330J	V 33p	50V Ceramic	AA
C287	VCCCCY1HH101J	V 100p	50V Ceramic	AA
C288	VCCCCY1HH680J	V 68p	50V Ceramic	AA
C290	VCCCCY1HH100D	V 10p	50V Ceramic	AA
C291	VCEA9M1CW106M	V 10	16V Electrolytic	AB
C294	VCCCCY1HH150J	V 15p	50V Ceramic	AA
C295	VCCCCY1HH100D	V 10p	50V Ceramic	AA
C296	VCCCCY1HH100D	V 10p	50V Ceramic	AA
C297	VCCCCY1HH270J	V 27p	50V Ceramic	AA
C298	VCKYCY1AF105Z	V 1	10V Ceramic	AC
C299	VCKYCY1CF104Z	V 0.1	16V Ceramic	AA
C401	VCCCCY1HH330J	V 33p	50V Ceramic	AA
C402	VCCCCY1HH330J	V 33p	50V Ceramic	AA
C403	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C404	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C405	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C406	VCEA9M0JW476M	V 47	6.3V Electrolytic	AB
C407	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C408	VCKYCY1HB561K	V 560p	50V Ceramic	AA
C409	VCKYCY1HF473Z	V 0.047	50V Ceramic	AA
C410	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C411	VCEA9M0JW476M	V 47	6.3V Electrolytic	AB
C412	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C413	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C414	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C415	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C416	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C417	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C418	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C440	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C445	VCKYCY1EF104Z	V 0.1	25V Ceramic	AA
C446	VCKYCY1AF105Z	V 1	10V Ceramic	AC
C447	VCCCCY1HH221J	V 220p	50V Ceramic	AA
C448	VCCCCY1HH120J	V 12p	50V Ceramic	AA
C449	VCCCCY1HH220J	V 22p	50V Ceramic	AA
C450	VCEA9M1CW106M	V 10	16V Electrolytic	AB
C454	VCEA9M1CW106M	V 10	16V Electrolytic	AB
C470	VCEA9M1HW475M	V 4.7	50V Electrolytic	AB

Ref. No.	Part No.	★	Description	Code
C471	VCEAEM1HW225M	V 2.2	50V Electrolytic	AB
C472	VCEAEM1HW225M	V 2.2	50V Electrolytic	AB
C473	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C474	VCEAEM1CW476M	V 47	16V Electrolytic	AB
C475	VCCCCY1HH301J	V 300p	50V Ceramic	AA
C476	VCCCCY1HH301J	V 300p	50V Ceramic	AA
C477	VCCCCY1HH221J	V 220p	50V Ceramic	AA
C478	VCCCCY1HH820J	V 82p	50V Ceramic	AA
C479	VCCCCY1HH271J	V 270p	50V Ceramic	AA
C480	VCCCCY1HH181J	V 180p	50V Ceramic	AA
C481	VCCCCY1HH301J	V 300p	50V Ceramic	AA
C482	VCCCCY1HH101J	V 100p	50V Ceramic	AA
C483	VCCCCY1HH301J	V 300p	50V Ceramic	AA
C501	VCCCCY1HH270J	V 27p	50V Ceramic	AA
C502	VCKYCY1CB473K	V 0.047	16V Ceramic	AA
C503	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C504	VCEA9M0JW476M	V 47	6.3V Electrolytic	AB
C505	VCEA9M1HW105M	V 1	50V Electrolytic	AB
C507	VCKYCY1EB153K	V 0.015	25V Ceramic	AA
C508	VCEA9M1HW475M	V 4.7	50V Electrolytic	AB
C509	VCEA9M1HW475M	V 4.7	50V Electrolytic	AB
C510	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C511	VCEA9M1CW106M	V 10	16V Electrolytic	AB
C512	VCCCCY1HH680J	V 68p	50V Ceramic	AA
C513	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C514	VCEA9M1HW105M	V 1	50V Electrolytic	AB
C515	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C516	VCEAEM1HW224M	V 0.22	50V Electrolytic	AB
C517	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C518	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C519	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C520	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C527	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C528	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C529	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA
C531	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C532	VCKYCY1CB104K	V 0.1	16V Ceramic	AB
C535	VCCCCY1HH180J	V 18p	50V Ceramic	AA
C536	VCCCCY1HH180J	V 18p	50V Ceramic	AA
C537	VCCCCY1HH330J	V 33p	50V Ceramic	AA
C538	VCCCCY1HH471J	V 470p	50V Ceramic	AA
C541	VCCCCY1HH270J	V 27p	50V Ceramic	AA
C556	VCKYCY1HF103Z	V 0.01	50V Ceramic	AA

**RESISTORS**

R202	VRS-CY1JF183J	V 18k	1/16W Metal Oxide	AA
R205	VRS-CY1JF562J	V 5.6k	1/16W Metal Oxide	AA
R206	VRS-CY1JF391J	V 390	1/16W Metal Oxide	AA
R207	VRS-CY1JF271J	V 270	1/16W Metal Oxide	AA
R208	VRS-CY1JF472J	V 4.7k	1/16W Metal Oxide	AA
R209	VRS-CY1JF472J	V 4.7k	1/16W Metal Oxide	AA
R210	VRS-CY1JF470J	V 47	1/16W Metal Oxide	AA
R211	VRS-CY1JF101J	V 100	1/16W Metal Oxide	AA
R212	VRS-CY1JF470J	V 47	1/16W Metal Oxide	AA
R213	VRS-CY1JF470J	V 47	1/16W Metal Oxide	AA
R214	VRS-CY1JF334J	V 330k	1/16W Metal Oxide	AA
R215	VRS-CY1JF122J	V 1.2k	1/16W Metal Oxide	AA
R216	VRS-CY1JF152F	V 1.5k	1/16W Metal Oxide	AA
R217	VRS-CY1JF682F	V 6.8k	1/16W Metal Oxide	AA
R218	VRS-CY1JF152F	V 1.5k	1/16W Metal Oxide	AA
R219	VRS-CY1JF682F	V 6.8k	1/16W Metal Oxide	AA
R220	VRS-CY1JF272F	V 2.7k	1/16W Metal Oxide	AA
R221	VRS-CY1JF682F	V 6.8k	1/16W Metal Oxide	AA
R222	VRS-CY1JF222J	V 2.2k	1/16W Metal Oxide	AA
R223	VRS-CY1JF391J	V 390	1/16W Metal Oxide	AA
R224	VRS-CY1JF222J	V 2.2k	1/16W Metal Oxide	AA
R225	VRS-CY1JF152F	V 1.5k	1/16W Metal Oxide	AA
R226	VRS-CY1JF822F	V 8.2k	1/16W Metal Oxide	AA
R227	VRS-CY1JF393J	V 39k	1/16W Metal Oxide	AA
R228	VRS-CY1JF101J	V 100	1/16W Metal Oxide	AA
R229	VRS-CY1JF103J	V 10k	1/16W Metal Oxide	AA
R230	VRS-CY1JF475J	V 4.7M	1/16W Metal Oxide	AA
R231	VRS-CY1JF821J	V 820	1/16W Metal Oxide	AA
R235	VRS-CY1JF561J	V 560	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
<b>DUNTK5742TE6A</b>				
<b>Y/C Unit (Continued)</b>				
R236	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R256	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R257	VRS-CY1JF681J	V	680 1/16W Metal Oxide	AA
R258	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R259	VRS-CY1JF102F	V	1k 1/16W Metal Oxide	AA
R260	VRS-CY1JF102F	V	1k 1/16W Metal Oxide	AA
R262	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
R263	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R264	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R272	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA
R273	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R274	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R275	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R276	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R277	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA
R278	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R279	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA
R281	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R283	VRS-CY1JF474J	V	470k 1/16W Metal Oxide	AA
R284	VRS-CY1JF271J	V	270 1/16W Metal Oxide	AA
R285	VRS-CY1JF270J	V	27 1/16W Metal Oxide	AA
R286	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R287	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R401	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
R402	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA
R405	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R406	VRS-CY1JF123J	V	12k 1/16W Metal Oxide	AA
R407	VRS-CY1JF272J	V	2.7k 1/16W Metal Oxide	AA
R408	VRS-CY1JF562J	V	5.6k 1/16W Metal Oxide	AA
R411	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R412	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R413	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
R414	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R415	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R416	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R417	VRS-CY1JF562J	V	5.6k 1/16W Metal Oxide	AA
R418	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R419	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R420	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA
R421	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R423	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R424	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R425	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R427	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R428	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R429	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R431	VRS-CY1JF124J	V	120k 1/16W Metal Oxide	AA
R432	VRS-CY1JF273J	V	27k 1/16W Metal Oxide	AA
R433	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R434	VRS-CY1JF273J	V	27k 1/16W Metal Oxide	AA
R435	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R436	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R437	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA
R438	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R439	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R440	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
R441	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R442	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R443	VRS-CY1JF102F	V	1k 1/16W Metal Oxide	AA
R444	VRS-CY1JF151J	V	150 1/16W Metal Oxide	AA
R445	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R446	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R447	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R448	VRS-CY1JF391J	V	390 1/16W Metal Oxide	AA
R449	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA
R451	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R452	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R453	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R454	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R455	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R456	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R461	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R462	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R464	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R465	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R479	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R480	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R481	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R489	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA
R496	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R497	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R498	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R501	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R502	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R503	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R504	VRS-CY1JF272J	V	2.7k 1/16W Metal Oxide	AA
R505	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R506	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R507	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R508	VRS-CY1JF681J	V	680 1/16W Metal Oxide	AA
R509	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA
R511	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R513	VRS-CY1JF681J	V	680 1/16W Metal Oxide	AA
R515	VRS-CY1JF331J	V	330 1/16W Metal Oxide	AA
R518	VRS-CY1JF331J	V	330 1/16W Metal Oxide	AA
R519	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R520	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R522	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R525	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R4488	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA

**MISCELLANEOUS PARTS**

FB201	RBLN-0036CEZZ	V	Ferrite Bead	AB
FB202	RBLN-0036CEZZ	V	Ferrite Bead	AB
SC201	QSOCN1279GEZZ	J	Socket, 12pin (AH)	AC
SC202	QSOCN1279GEZZ	J	Socket, 12pin	AC
SC203	QSOCN1279GEZZ	J	Socket, 12pin	AC
SC204	QSOCN1079GEZZ	J	Socket, 10pin	AC
TP202	QLUGP0101AJFW	V	Lug	AB
TP203	QLUGP0101AJFW	V	Lug	AB
TP402	QLUGP0101AJFW	V	Lug	AB
TP403	QLUGP0101AJFW	V	Lug	AB
TP501	QLUGP0101AJFW	V	Lug	AB

**DUNTK5619TEV3**  
**Hi-Fi/Jack Unit****INTEGRATED CIRCUITS**

IC161	VHiCA1124BQ-1	V	CXA1124BQ	AY
IC651	VHiTA1246AF-1	V	TA1246AF	AQ
IC6601	VHiBU4066CF1E	V	BU4066BCF	AE

**TRANSISTORS**

Q6601	VSDTC144EK/-1	V	DTC144EK	AB
Q6602	VSDTC144EK/-1	V	DTC144EK	AB
Q6603	VSDTC144EK/-1	V	DTC144EK	AB

**COILS**

L651	VPADK153J0000	V	1.5mH	AC
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**CONTROLS**

R162	RVR-M4815GEZZ	J	47k(B), ST VCO Adj.	AC
R163	RVR-M4813GEZZ	J	22k(B), Filter Adj.	AC
R164	RVR-M4815GEZZ	J	47k(B), Separation(1) Adj.	AC
R165	RVR-M4809GEZZ	J	4.7k(B), Separation(2) Adj.	AC

**CAPACITORS**

C162	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
C163	VCKYCY1EB123K	V	0.012 25V Ceramic	AA
C164	VCKYCY1HB562K	V	5600p 50V Ceramic	AA
C165	VCEA9M1HW474M	V	4.7 50V Electrolytic	AB
C166	VCEA9A1HW475M	V	4.7 50V Electrolytic	AB

Ref. No.	Part No.	★	Description	Code
<b>DUNTK5619TEV3</b>				
<b>Hi-Fi/Jack Unit (Continued)</b>				
C167	VCKYCY1CB473K	V	0.047 16V Ceramic	AA
C168	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
C169	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
C170	VCEA9M1HW335M	V	3.3 50V Electrolytic	AB
C171	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C172	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C173	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
C174	VCKYCY1HB272K	V	2700p 50V Ceramic	AA
C175	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C176	VCE9EA1HW474M	V	0.47 50V Elect.(N.P)	AB
C179	VCEA9M1CW476M	V	47 16V Electrolytic	AB
C651	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C652	VCEA2A0JW337M	V	330 6.3V Electrolytic	AB
C653	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C654	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C655	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C656	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C657	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C658	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C659	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C660	VCEA9M0JW226M	V	22 6.3V Electrolytic	AB
C661	VCEA9M0JW226M	V	22 6.3V Electrolytic	AB
C663	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C664	VCEA2A0JW337M	V	330 6.3V Electrolytic	AB
C665	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C666	VCFYSA1HB563J	V	0.056 50V M.Polypto	AA
C667	VCKYCY1HB681K	V	680p 50V Ceramic	AA
C668	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C669	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C670	VCKYCY1EB103K	V	0.01 25V Ceramic	AA
C671	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C672	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C673	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C674	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
C675	VCEA2A1CW337M	V	330 16V Electrolytic	AB
C676	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C677	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C678	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C679	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C680	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C681	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C682	VCEA9M0JW226M	V	22 6.3V Electrolytic	AB
C683	VCEA9M1CW226M	V	22 16V Electrolytic	AB
C686	VCCCY1HH101J	V	100p 50V Ceramic	AA
C696	VCKYCY1HB681K	V	680p 50V Ceramic	AA
C6501	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C6502	VCKYCY1CB104K	V	0.1 16V Ceramic	AB
C6608	VCEA9M1CW107M	V	100 16V Electrolytic	AB
C6609	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C6610	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C6611	VCEA9M1CW476M	V	47 16V Electrolytic	AB
C6612	VCKYCY1EB103K	V	0.01 25V Ceramic	AA

**RESISTORS**

R166	VRS-CY1JF105J	V	1M 1/16W Metal Oxide	AA
R167	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R168	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA
R169	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA
R170	VRS-CY1JF104J	V	100k 1/16W Metal Oxide	AA
R171	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R172	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R173	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R174	VRS-CY1JF393J	V	39k 1/16W Metal Oxide	AA
R175	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
R176	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
R177	VRS-CY1JF392J	V	3.9k 1/16W Metal Oxide	AA
R178	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R179	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R180	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R181	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R652	VRS-CY1JF000J	V	00 1/16W Metal Oxide	AA
R654	VRS-CY1JF000J	V	00 1/16W Metal Oxide	AA
R655	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
R656	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
R659	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R660	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R661	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R662	VRD-RA2BE333J	V	33k 1/8W Carbon	AA
R663	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R664	VRD-RA2BE333J	V	33k 1/8W Carbon	AA
R665	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R666	VRD-RA2BE333J	V	33k 1/8W Carbon	AA
R667	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R668	VRD-RA2BE333J	V	33k 1/8W Carbon	AA
R669	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R670	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R671	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R672	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
R673	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R674	VRS-CY1JF105J	V	1M 1/16W Metal Oxide	AA
R6501	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R6502	VRS-CY1JF100J	V	10 1/16W Metal Oxide	AA
R6503	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R6504	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R6505	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R6506	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R6507	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R6508	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R6509	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R6510	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R6601	VRD-RA2BE333J	V	33k 1/8W Carbon	AA
R6602	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R6606	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R6607	VRD-RA2BE273J	V	27k 1/8W Carbon	AA
R6608	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R6609	VRD-RA2BE273J	V	27k 1/8W Carbon	AA
R6610	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R6614	VRS-CY1JF124J	V	120k 1/16W Metal Oxide	AA
R6615	VRS-CY1JF124J	V	120k 1/16W Metal Oxide	AA
R6616	VRS-CY1JF124J	V	120k 1/16W Metal Oxide	AA
R6617	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R6619	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R6620	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R6626	VRD-RA2BE103J	V	10k 1/8W Carbon	AA
R6630	VRS-CY1JF000J	V	00 1/16W Metal Oxide	AA

**MISCELLANEOUS PARTS**

J6501	QJAKH0020GEZZ	J	Jack	AH
J6502	QJAKH0021GEZZ	J	Jack	AH
J6503	QJAKG0034GEZZ	J	Jack	AF
P164	QPLGN0248REZZ	V	Plug, 2pin(TP164-5)	AA
P168	QPLGN0248REZZ	V	Plug, 2pin(TP168-9)	AA
SC651	QSOCZ1060GEZZ	J	Socket, 10pin	AC
SC652	QSOCZ1260GEZZ	J	Socket, 12pin	AD
SC653	QSOCZ1060GEZZ	J	Socket, 10pin	AC
SC654	QSOCZ0460GEZZ	J	Socket, 4pin	AC

**DUNTK5729TE6A**  
**NR Unit****INTEGRATED CIRCUITS**

IC2301	VHiLC74391E-1	V	I.C.	AZ
IC2302	VHiCXA1211M-1	V	CXA1211M	AH
IC2303	VHiTC90A45F-1	V	TC90A45F	AM
IC2304	VHiNJM2283F-1	V	NJM2283M	AF

**TRANSISTORS**

Q2301	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q2302	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q2303	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q2304	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q2305	VS2SC2412KQ-1	V	2SC2412KQ	AA



Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>DUNTK5729TE6A</b>									
<b>NR Unit (Continued)</b>									
Q2306	VS2SC2412KQ-1	V	2SC2412KQ	AA	C2350	VCCCCY1HH120J	V	12p 50V Ceramic	AA
Q2307	VS2SA1037KQ-1	V	2SA1037KQ	AA	C2351	VCCCCY1HH8R0D	V	8p 50V Ceramic	AA
Q2308	VS2SC2412KQ-1	V	2SC2412KQ	AA	C2352	VCKYCY1CF333Z	V	0.033 16V Ceramic	AA
Q2309	VS2SC2412KQ-1	V	2SC2412KQ	AA	C2353	VCKYCY1CF333Z	V	0.033 16V Ceramic	AA
Q2310	VS2SA1037KQ-1	V	2SA1037KQ	AA	C2354	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
Q2311	VS2SC2412KQ-1	V	2SC2412KQ	AA	C2355	VCEA9M1HW225M	V	2.2 50V Electrolytic	AB
Q2312	VS2SC2412KQ-1	V	2SC2412KQ	AA	C2356	VCEA9M1HW105M	V	1 50V Electrolytic	AB
Q2313	VS2SC2412KQ-1	V	2SC2412KQ	AA	C2357	VCKYCY1CF333Z	V	0.033 16V Ceramic	AA
<b>DIODE</b>					C2358	VCEA9M1CW106M	V	10 16V Electrolytic	AB
D2301	VHD1SS119/-1	V	Diode	AB	C2359	VCEA9M1CW106M	V	10 16V Electrolytic	AB
<b>COILS</b>					C2360	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
L2301	VP-MK470K0000	V	47μH	AB	C2361	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
L2302	VP-MK470K0000	V	47μH	AB	C2362	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
L2303	VP-MK270K0000	V	27μH	AB	C2363	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
L2304	VP-MK330K0000	V	33μH	AB	C2364	VCKYCY1HB332K	V	3300p 50V Ceramic	AA
L2305	VP-MK330K0000	V	33μH	AB	C2365	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
L2306	VP-MK270K0000	V	27μH	AB	C2370	RC-EZ0435GEZZ	J	Capacitor	AB
L2307	VP-MK470K0000	V	47μH	AB	<b>RESISTORS</b>				
<b>CAPACITORS</b>					R2301	VRS-CY1JF153J	V	15k 1/16W Metal Oxide	AA
C2301	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB	R2302	VRS-CY1JF561J	V	560 1/16W Metal Oxide	AA
C2302	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB	R2303	VRS-CY1JF561J	V	560 1/16W Metal Oxide	AA
C2303	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB	R2304	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2304	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB	R2305	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2305	VCKYCY0JB105K	V	1 6.3V Ceramic	AC	R2306	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2306	VCCCCY1HH101J	V	100p 50V Ceramic	AA	R2307	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
C2307	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2308	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
C2308	VCKYCY1CF333Z	V	0.033 16V Ceramic	AA	R2309	VRS-CY1JF331J	V	330 1/16W Metal Oxide	AA
C2309	VCEA9M1HW105M	V	1 50V Electrolytic	AB	R2310	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
C2310	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2311	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
C2311	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA	R2312	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
C2312	VCKYCY1HB102K	V	1000p 50V Ceramic	AA	R2313	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
C2313	VCCCCY1HH100D	V	10p 50V Ceramic	AA	R2314	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2314	VCCCCY1HH100D	V	10p 50V Ceramic	AA	R2315	VRS-CY1JF271J	V	270 1/16W Metal Oxide	AA
C2315	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2316	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
C2317	VCCCCY1HH100D	V	10p 50V Ceramic	AA	R2317	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
C2318	VCCCCY1HH470J	V	47p 50V Ceramic	AA	R2318	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2319	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	R2319	VRS-CY1JF271J	V	270 1/16W Metal Oxide	AA
C2320	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	R2320	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
C2321	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	R2321	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA
C2322	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2322	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA
C2323	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	R2323	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
C2324	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB	R2325	VRD-RA2BE222J	V	2.2k 1/8W Carbon	AA
C2325	VCKYCY1AF105Z	V	1 10V Ceramic	AC	R2326	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
C2326	VCCCCY1HH121J	V	120p 50V Ceramic	AA	R2327	VRD-RA2BE821J	V	820 1/8W Carbon	AA
C2327	VCCCCY1HH181J	V	180p 50V Ceramic	AA	R2328	VRD-RA2BE182J	V	1.8k 1/8W Carbon	AA
C2328	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	R2329	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2329	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	R2330	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
C2330	VCKYCY1EB103K	V	0.01 25V Ceramic	AA	R2331	VRD-RA2BE471J	V	470 1/8W Carbon	AA
C2331	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB	R2332	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2332	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	R2333	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
C2333	VCCCCY1HH120J	V	12p 50V Ceramic	AA	R2334	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
C2334	VCCCCY1HH120J	V	12p 50V Ceramic	AA	R2335	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
C2335	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	R2336	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
C2336	VCCCCY1HH560J	V	56p 50V Ceramic	AA	R2337	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2337	VCCCCY1HH5R0C	V	5p 50V Ceramic	AA	R2338	VRS-CY1JF273J	V	27k 1/16W Metal Oxide	AA
C2338	VCCCCY1HH120J	V	12p 50V Ceramic	AA	R2339	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
C2339	VCCCCY1HH120J	V	12p 50V Ceramic	AA	R2340	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
C2340	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2341	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
C2341	VCKYCY0JB105K	V	1 6.3V Ceramic	AC	R2342	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
C2342	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2343	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
C2343	VCCCCY1HH330J	V	33p 50V Ceramic	AA	R2344	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
C2344	VCCCCY1HH120J	V	12p 50V Ceramic	AA	R2345	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA
C2345	VCEA9M1CW476M	V	47 16V Electrolytic	AB	R2346	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
C2346	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2347	VRS-CY1JF681J	V	680 1/16W Metal Oxide	AA
C2347	VCEA9M1CW106M	V	10 16V Electrolytic	AB	R2348	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
C2348	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA	R2349	VRS-CY1JF333J	V	33k 1/16W Metal Oxide	AA
C2349	VCCCCY1HH120J	V	12p 50V Ceramic	AA	R2350	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
					R2351	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
					R2352	VRS-CY1JF105J	V	1M 1/16W Metal Oxide	AA
					R2353	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
					R2354	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
					R2355	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
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### DUNTK5729TE6A NR Unit (Continued)

R2356	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R2357	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R2358	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R2359	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R2360	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R2361	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA
R2362	VRS-CY1JF822J	V	8.2k 1/16W Metal Oxide	AA
R2363	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R2364	VRS-CY1JF272J	V	2.7k 1/16W Metal Oxide	AA
R2365	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R2366	VRS-CY1JF470J	V	47 1/16W Metal Oxide	AA
R2372	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R2373	VRS-CY1JF182J	V	1.8k 1/16W Metal Oxide	AA

#### MISCELLANEOUS PARTS

FB2301	RBLN-0077TAZZ	V	Ferrite Bead	AB
FB2302	RBLN-0077TAZZ	V	Ferrite Bead	AB
FB2303	RBLN-0077TAZZ	V	Ferrite Bead	AB
FB2304	RBLN-0077TAZZ	V	Ferrite Bead	AB
FB2305	RBLN-0077TAZZ	V	Ferrite Bead	AB
FB2306	RBLN-0076TAZZ	V	Ferrite Bead	AC
FB2307	RBLN-0076TAZZ	V	Ferrite Bead	AC
FB2308	RBLN-0076TAZZ	V	Ferrite Bead	AC
P2301	QPLGZ1195GEZZ	J	Plug, 11pin	AD
P2302	QPLGZ1195GEZZ	J	Plug, 11pin	AD
W2301	PSLDM4541AJFW	V	Shield	AF
W2302	PSLDM4542AJFW	V	Shield	AF

### DUNTK5659TEV2 Jack Unit

#### CAPACITORS

C2554	VCKYCY1EF104Z	V	0.1 25V Ceramic	AA
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#### RESISTORS

R2201	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R2203	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA
R2552	VRS-CY1JF750J	V	75 1/16W Metal Oxide	AA

#### MISCELLANEOUS PARTS

J202	QJAKE0195GEZZ	J	Jack	AC
J601	QJAKE0158GEZZ	J	Jack	AC
J602	QJAKE0157GEZZ	J	Jack	AC
SC205	QSOCD0439CEZZ	V	Socket, S-Input	AF
SC8801	QSOCD0804REN1	V	Socket, 4pin	AB
	LHLDZ2056AJZZ	V	Jack PWB Holder	AE

Ref. No.	Part No.	★	Description	Code
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### MECHANISM CHASSIS PARTS

1	LBNDK1011AJZZ	V	Tension Band	AH
2	LBOSZ1007AJZZ	V	Tension Arm boss	AD
3	LBOSZ1006AJZZ	V	Cassette Stay L	AD
5	LCHSM0170AJZZ	V	Main Chassis Ass'y	BA
6	LHLDZ2016AJZZ	V	Loading Motor Block	AG
7	LPOLM0070GEZZ	J	Supply Pole Base Ass'y	AK
8	LPOLM0064GEZZ	J	Take-Up Pole Base Ass'y	AM
9	MLEVF0518AJZZ	V	Take-Up Loading Arm Ass'y	AF
10	MLEVF0519AJZZ	V	Supply Loading Arm Ass'y	AF
11	MLEVF0499AJZZ	V	Pinch Drive Lever Ass'y	AG
12	MLEVF0500GEZZ	J	Pinch Roller Lever Ass'y	AW
15	MLEVF0523AJZZ	V	Tension Arm Ass'y	AH
16	LANGF9620AJFW	V	A/C Head Plate	AG
17	MLEVP0271AJZZ	V	Sifter Drive Lever	AE
18	MLEVP0272AJZZ	V	Pinch Double Action Lever	AD
19	MLEVP0301AJZZ	V	Reverse Guide Lever Ass'y	AL
20	MLEVP0275AJZZ	V	Reverse Drive Lever	AD
21	MLEVP0292AJZZ	V	Slow Brake Lever	AE
22	MLEVP0290AJZZ	V	Open Lever	AD
23	MLEVP0293AJZZ	V	Clutch Lever	AE
24	MLEVP0294AJZZ	V	Sup Main Brake Ass'y	AF
25	MLEVP0295AJZZ	V	Take-Up Main Brake Ass'y	AF
26	CLEVP0287GEZZ	J	Auto Head Cleaner Ass'y	AF
27	MSLIP0010AJZZ	V	Sifter	AH
29	MSPRD0175AJFJ	V	Reverse Guide Spring 2	AE
30	MSPRT0402AJFJ	V	Loading Double Action Spring	AE
31	MSPRT0403AJFJ	V	Pinch Double Action Spring	AD
32	MSPRC0213AJFJ	V	Earth Spring	AC
33	MSPRT0416AJFJ	V	Tension Spring	AD
34	NBLTK0067AJ00	V	Reel Belt	AE
35	NDAIV1078AJ00	V	Reel Disk	AE
36	NGERH1293AJZZ	V	Loading Connect Gear	AD
37	NGERH1295AJ00	V	Master Cam	AE
38	NGERH1294AJZZ	V	Casecon Drive Gear	AD
39	NGERH1270AJZZ	V	Take-Up Loading Gear	AF
40	NGERH1271AJZZ	V	Supply Loading Gear	AD
41	NGERH1272AJZZ	V	Pinch Drive Cam	AE
43	NGERH1299AJZZ	V	Reel Relay Gear	AE
44	NGERW1070AJZZ	V	Worm Gear	AD
45	NGERW1066AJZZ	V	Worm Wheel Gear	AD
46	NIDR-0018AJZZ	V	Idle Wheel Ass'y	AK
47	NPLYV0162AJZZ	V	Motor Pulley	AD
48	NPLYV0163AJZZ	V	Limiter Pulley Ass'y	AM
49	NROLP0131GEZZ	J	Guide Roller	AL
50	NSFTP0032AJZZ	V	Tension Pole Adjuster	AB
51	MSPRC0217AJFJ	V	Guide Roller Spring	AC
52	PREFL1011AJZZ	V	Light Guide	AE
53	QCNW-0308AJZZ	V	FFC for Drum Motor	AG
55	QCNW-0272AJZZ	V	FFC for A/C Head	AF
56	QPWBF5469AJZZ	V	A/C Head PWB	AE
57	QSOCD0605REN1	V	Socket, 6 pin	AB
58	RHEDT0036AJZZ	V	Full Erase Head	AM
59	RHEDU0088GEZZ	J	A/C Head Ass'y	AV
60	RMOTM1078GEZZ	J	Loading Motor	AP
61	RMOTN2055GEZZ	J	Capstan Motor	BA
62	RMOTP1135GEZZ	J	Drum Drive Motor	AX
63	DDRMW0030TEX5	V	Upper and lower drum Ass'y	BS
65	QBRSK0041GEZZ	J	Drum Earth Brush	AD
66	XBPSD26P05J00	V	Drum Drive Motor Mounting Screw (SW2.6P+5S)	AA
67	PGIDC0056GEFW	V	Drum Base	AL
68	QPWBF5468AJZZ	V	PWB(LDG Motor)	AE
69	QPLGZ0292GEZZ	J	Socket(LDG Motor)	AE

Ref. No.	Part No.	★	Description	Code
<b>MECHANISM CHASSIS PARTS (Continued)</b>				
70	MSPRC0223AJFJ	V	Azimuth Spring	AC
71	MSPRC0224AJFJ	V	Height Adjusting spring	AC
72	MSLIP0012AJZZ	V	S Slide Shaft G	AD
73	MSPRD0183GEFJ	J	I-Roller Arm Spring	AC
74	MARMP0059GEZZ	J	I-Roller Arm G	AE
75	NROLP0066GEZZ	J	I-Roller	AD

<b>SCREW, NUTS AND WASHERS</b>				
201	XBPSD26P08000	V	Screw 2.6P+8S A/C Head	AA
202	LX-HZ3082GEZZ	J	A/C Head Screw	AD
203	XHPSD26P06000	V	Screw, C2.6P+6S" (For Capstan Motor)	AA
207	XHPSD30P08WS0	V	Screw, C3.0P+8S" (For Drum Base)	AA
208	XRESJ30-06000	V	E-Ring, E-3"	AA
209	XWHJZ31-03052	V	Washer, W3.1-5.2-0.5"	AC
210	XWHJZ31-04052	V	Washer, W3.1-5.2-0.3"	AC
211	XWHJZ31-05052	V	Washer, W3.1-5.2-0.4"	AC
212	XWHJZ31-06052	V	Washer, W3.1-5.2-0.6"	AC
213	XWHJZ31-07052	V	Washer, W3.1-5.2-0.7"	AC
214	PSPAP0009AJZZ	V	Reverse Guide Adjusting Nut	AB
216	LX-WZ1041GE00	J	CW 2.5-6-0.5 CAM	AA
218	XBPSD30P08J00	V	Drum Base Mounting Screw (SW 3P+8S)	AA
219	LX-WZ1098GE00	J	CW 2.6-4.7-0.5 RED	AB
220	LX-BZ3096GEFD	J	Tilt Adjusting Screw	AA
221	XBPSD26P06000	V	Azimuth Adjusting Screw 2.6+6S	AA
222	LX-BZ3197GEFD	J	Screw (A/C Head)	AD
223	XWHJZ31-08052	V	Washer, W3.1-5.2-0.8"	AC
224	XWHJZ21-05050	V	Washer, W2.1-5.0-0.5"	AA
225	LX-RZ3015GEFJ	J	CS Washer	AB
226	LX-WZ1044GE00	J	CW 1.6-4-0.5 I/R	AA

<b>CASSETTE HOUSING CONTROL PARTS</b>				
300	CHLDX3081TEV2	V	Cassette Housing Control Ass'y	AX
301	LANGF9592AJFW	V	Upper Plate	AL
302	LHLDX1028AJ00	V	Frame (L)	AH
303	LHLDX1030AJZZ	V	Frame (R)	AE
304	LHLDX1031AJZZ	V	Holder (L)	AE
305	LHLDX1032AJ00	V	Holder (R)	AH
306	MLEVF0469AJFW	V	Proof Lever (R)	AE
307	MLEVP0281AJ00	V	Door Open Lever	AD
308	MSLIF0076AJFW	V	Slider	AK
309	MSPRD0151AJFJ	V	Proof Lever (R) Spring	AB
310	MSPRD0166AJFJ	V	Drive Gear (R) Spring	AE
311	MSPRP0175AJFJ	V	Cassette Spring	AE
312	MSPRT0381AJFJ	V	Double Action Spring	AC
313	NGERH1278AJZZ	V	Drive Gear L	AE
314	NGERH1309AJZZ	V	Drive Gear R	AE
315	NGERR1008AJ00	V	Double Action Rack Gear	AE
316	NGERR3005AJFW	V	Drive Angle Gear	AG
317	NSFTD0041AJFD	V	Main Shaft	AH

Ref. No.	Part No.	★	Description	Code
<b>MECHANICAL PARTS</b>				
600	CCABA3119TEV4	V	Top Cabinet Ass'y	AY
601	GCABB1196AJKZ	V	Main Frame	AT
602	GCOVA2133AJKZ	V	Antenna Terminal Cover	AK
603	GBDYU3126AJFW	V	Bottom Plate	AM
604	LANGK0184AJFW	V	Top Cabinet Fix Angle(L)	AE
605	LANGK0185AJFW	V	Top Cabinet Fix Angle(R)	AF
606	LHLDZ2044AJZZ	V	Front PWB Holder(R)	AD
607	LHLDZ2045AJZZ	V	Front PWB Holder(L)	AD
608	LHLDZ2048AJZZ	V	Y/C Holder	AG
609	LX-HZ3047GEFF	J	Screw	AA
610	LX-HZ3087GEFN	J	Screw	AB
611	LX-HZ3098GEFF	J	Screw	AB
612	LHLDZ1962AJ00	V	Sensor LED Holder	AD
613	PSLDM4558AJFW	V	H/A Shild (Bottom)	AF
614	LHLDZ2055AJZZ	V	C/B LED Holder	AD
617	LX-HZ3102GEZZ	J	Screw	AB
618	XEBSD30P12000	V	Screw	AA
619	XHPSD30P06WS0	V	Screw	AA
620	XEPSD30P14XS0	V	Screw	AB
621	XJPSD30P10WS0	V	Screw	AA
622	PGUMS0026AJZZ	V	Rubber	AB
625	LHLDZ2054AJZZ	V	Display Holder (Top)	AF
626	LHLDP1089AJ00	V	LED Holder	AC
627	LHLDP1179AJZZ	V	LED Holder S-ET	AE
628	LHLDZ2056AJZZ	V	Jack PWB Holder	AE
629	TLABM4046AJZZ	V	Model Label	AB
640	PZETZ0004AJZZ	V	Insulation Sheet	AE
641	PSLDM4567AJFW	V	Drum Shield	AK
642	XHPSD26P06WS0	V	Screw	AA
650	PZETL0001AJZZ	V	Insulation Sheet	AC

<b>FRONT PANEL PARTS</b>				
501	CPNLC2628TEV1	V	Front Panel Ass'y	AY
501-1	Not Available	-	Front Panel	—
501-2	HBDBG3032AJSB	V	SHARP Badge	AL
501-3	HDECQ1982AJSA	V	Cassette Flap	AN
501-4	HDECQ1914AJSA	V	Cassette Flap Dec.	AD
501-5	HDECQ2073AJSA	V	Window Dec.	AH
501-6	JBTN-2920AJSA	V	Button, STOP	AG
501-7	JBTN-2898AJSA	V	Button, MENU	AE
501-8	JBTN-2955AJSC	V	Button, CH	AD
501-9	JBTN-2900AJSC	V	Button, REC	AF
501-10	JBTN-2983AJSA	V	Button, AV	AF
501-11	JBTN-2954AJSC	V	Button, POWER	AD
501-12	HDECQ1908AJSA	V	GAMMA LED DEC.	AE
501-13	HDECQ1909AJSA	V	DISPLAY LED DEC.	AE
501-14	MSPRD0103AJFJ	V	Cassette Spring	AB
502	XEBSD26P08000	V	Screw	AA
503	QSW-Z0071GEZZ	J	Switch,	AM
504	JBTN-2919AJSA	V	PLAY Button	AH
505	JKNBK1110AJSB	V	Knob	AH
506	HiNDP2104AJSA	V	S-VHS Plate	AC

Ref. No.	Part No.	★	Description	Code
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SUPPLIED ACCESSORIES

ACCESSORIES

TINS-3599AJZZ	V	Operation Manual	AK
QCNW-8070AJZZ	V	Audio/Video Cable	AN
QCNW-1350TAZZ	V	S-VHS Cable	AN
QCNW-0298AJZZ	V	75 ohm Coaxial Cable	AK

ACCESSORIES

(Not Replacement Item)

TGAN-0001AJZZ	-	Guarantee Card	—
TCADH0110AJZZ	-	Timer Card	—
TLABS0415AJZZ	-	Caution Label	—
TLABZ1617AJZZ	-	Feature Label	—

PACKING PARTS  
(NOT REPLACEMENT ITEM)

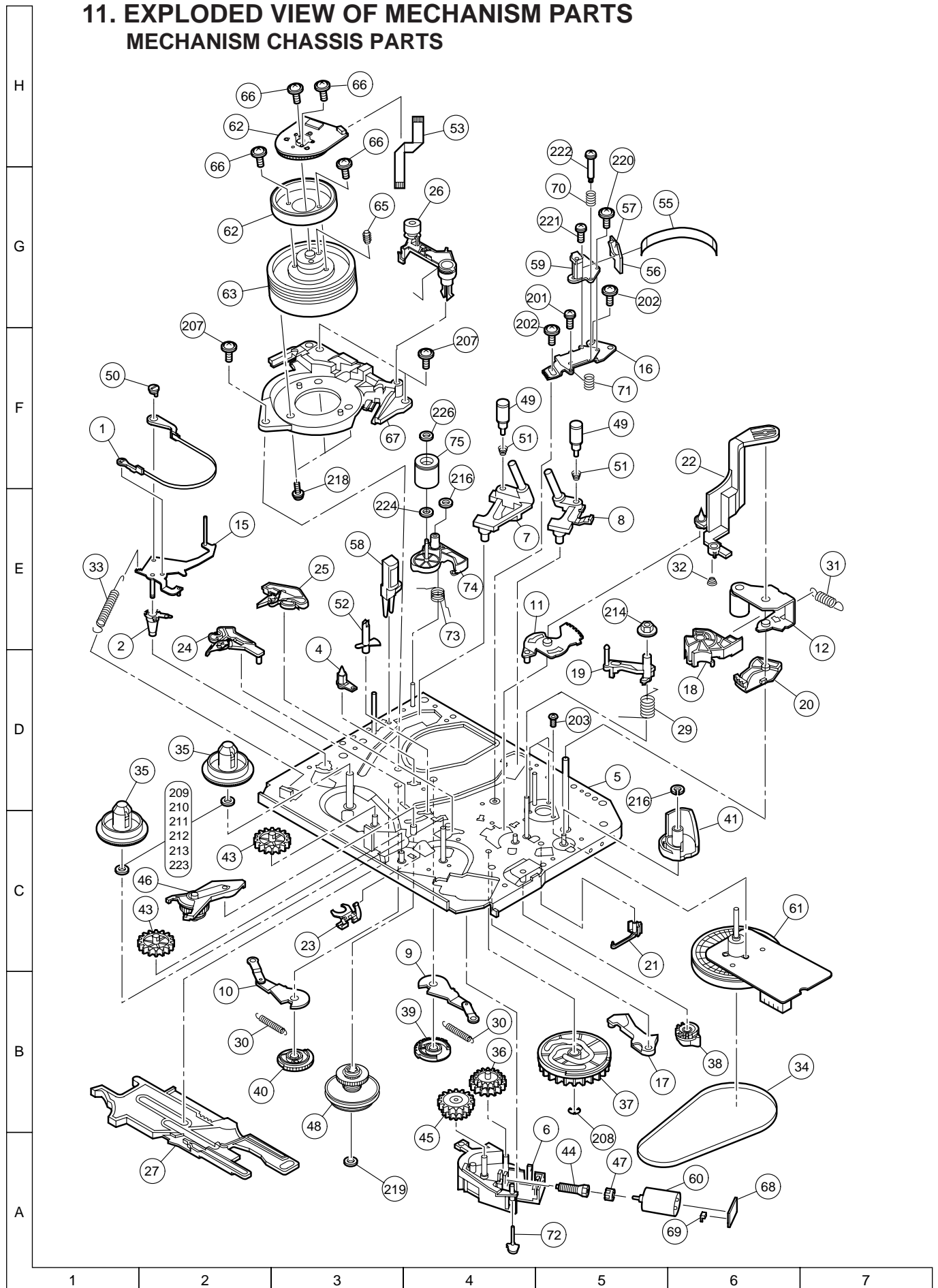
SPAKC4108AJZZ	-	Packing Case	—
SPAKX1018AJZZ	-	Packing Foam	—
SSAKA0001AJZZ	-	Polyethyrene Sack	—
SPAKP0030AJZZ	-	Polyethyrene Bag	—

Ref. No.	Part No.	★	Description	Code
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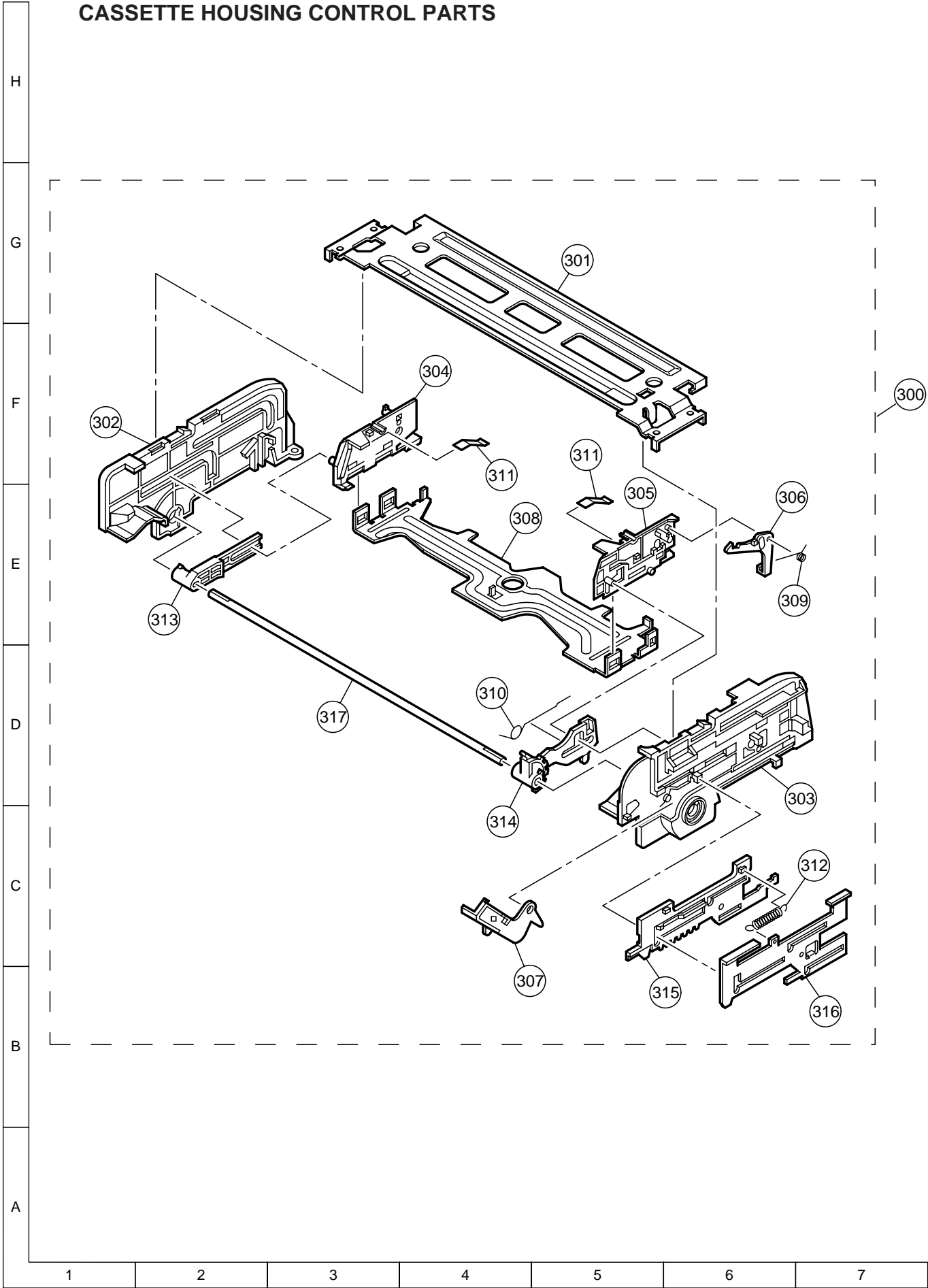


## 11. EXPLODED VIEW OF MECHANISM PARTS

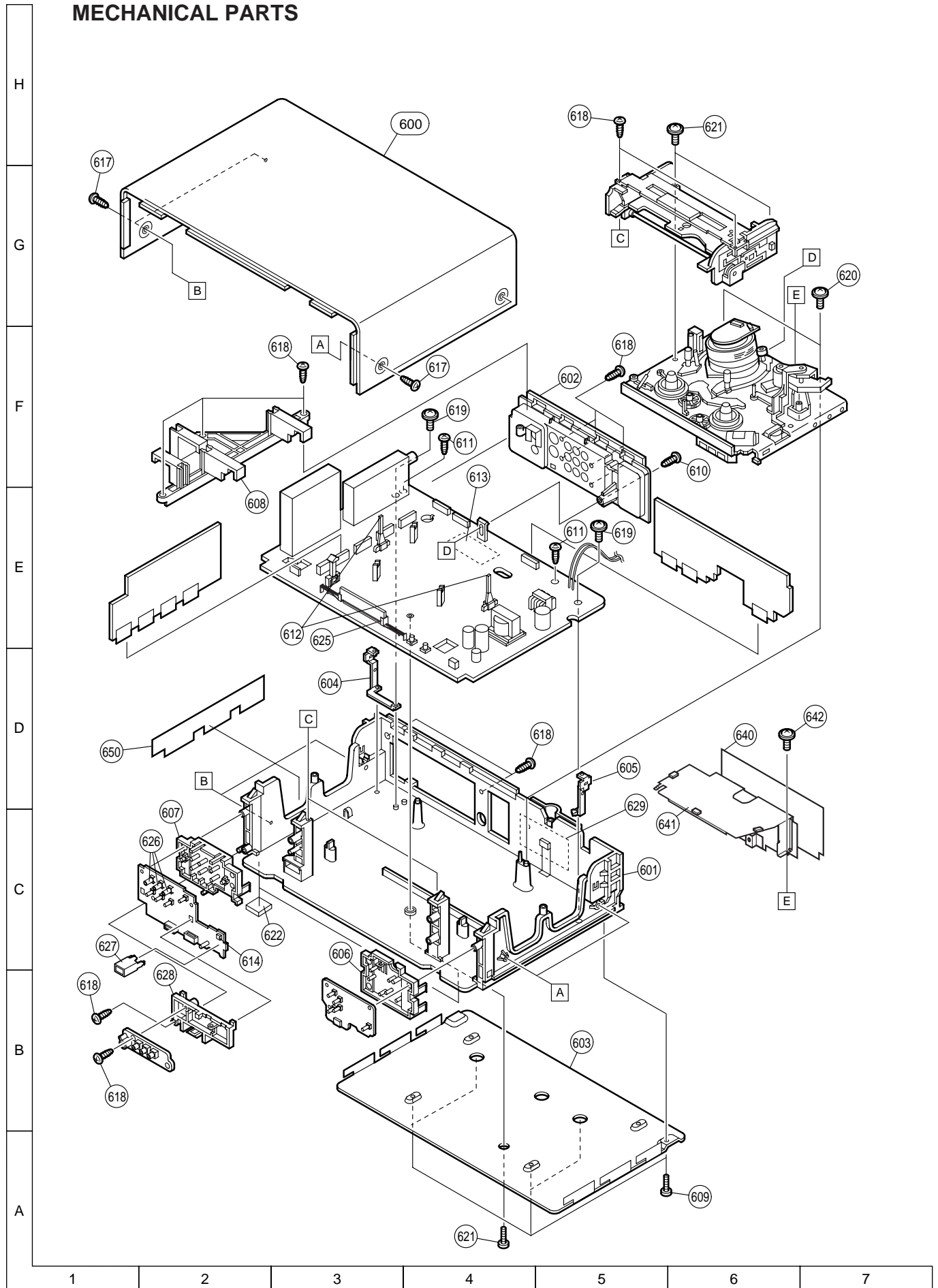
### MECHANISM CHASSIS PARTS



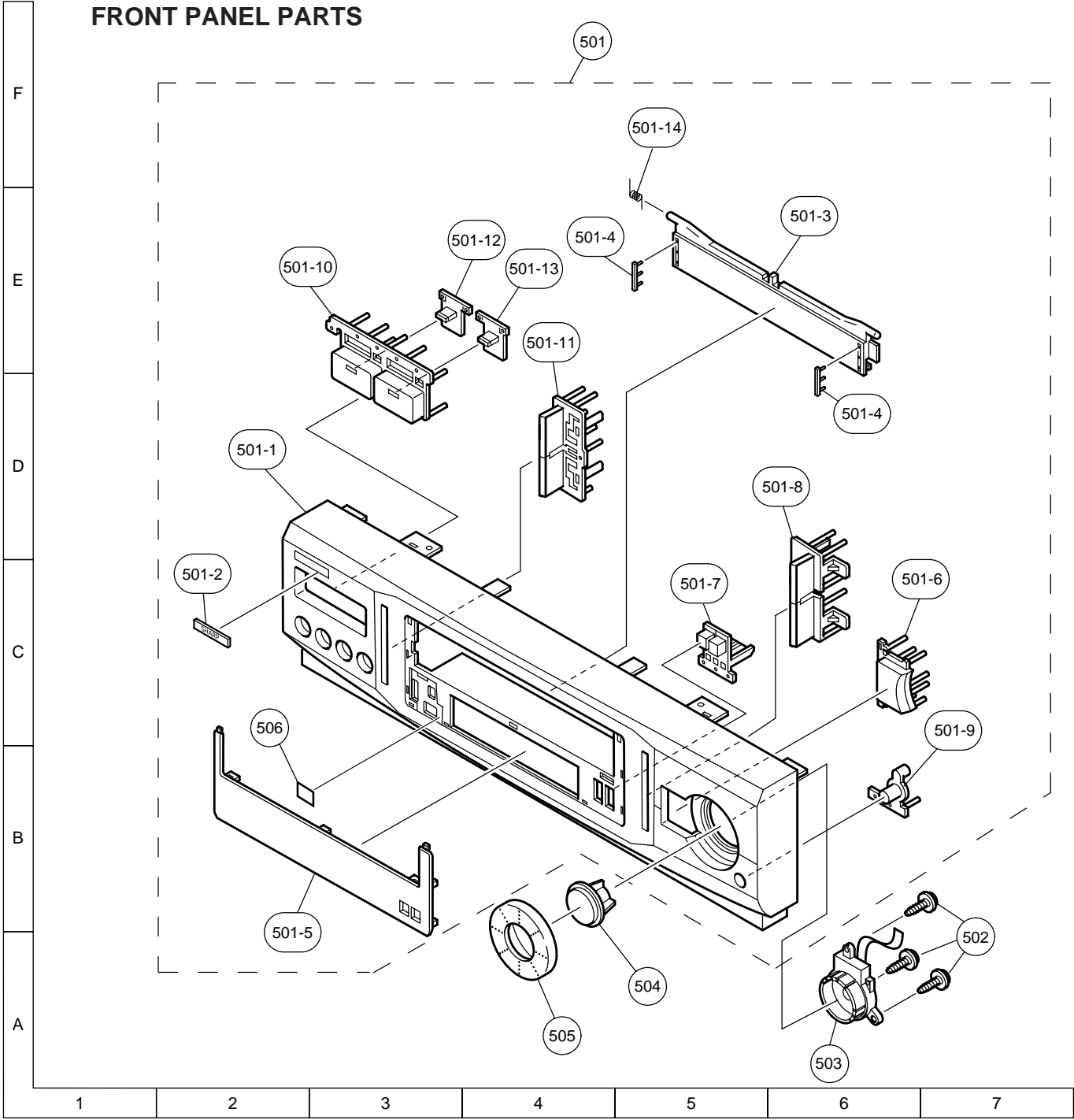
CASSETTE HOUSING CONTROL PARTS



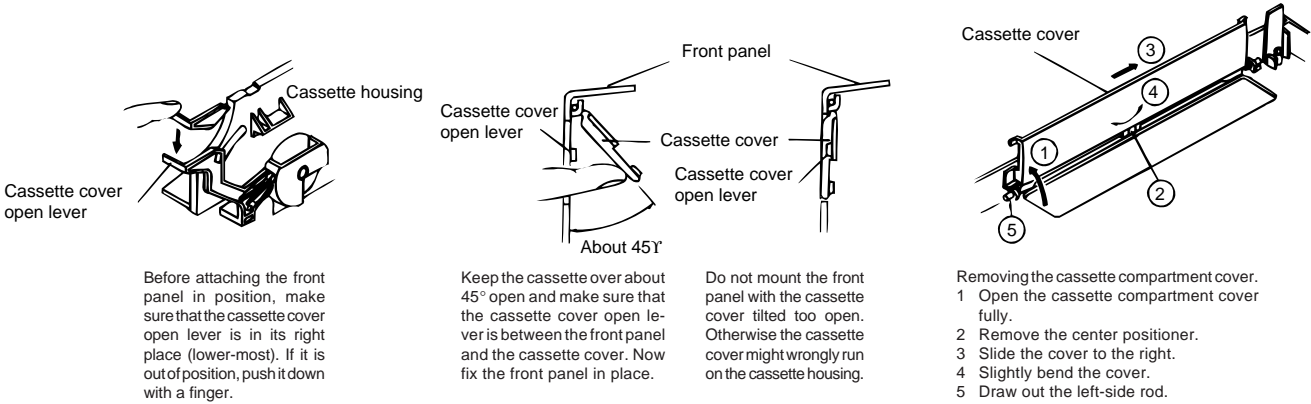
## MECHANICAL PARTS



FRONT PANEL PARTS



PRECAUTION ON FRONT PANEL SET-UP



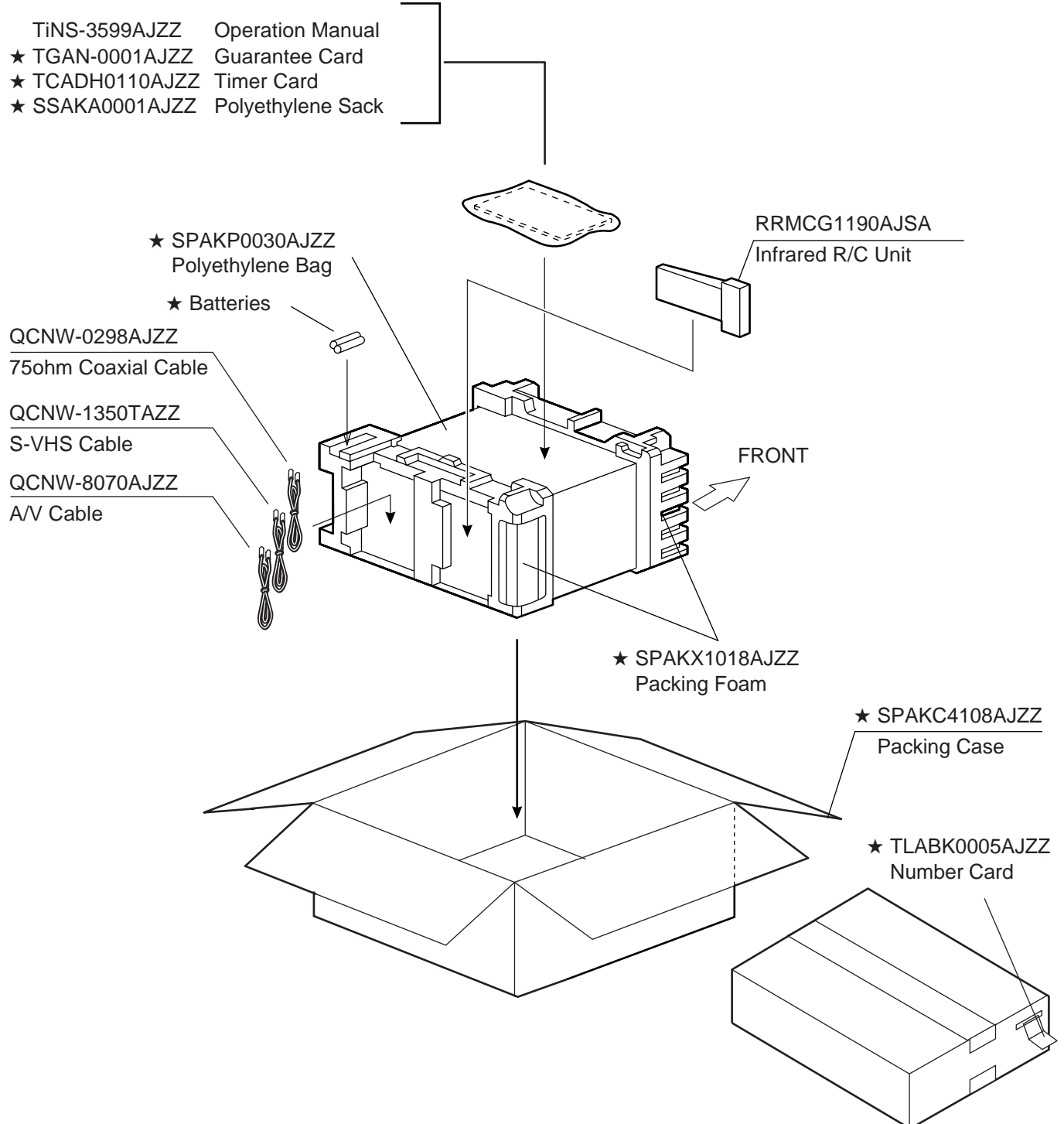


## 12. PACKING OF THE SET

### ■ Setting of the Knobs

RF conv. CH. preset	at "3" channel
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### Accessories



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